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**NAVAL
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THESIS

**THE LAST RESPONDERS: APPROACHING THE DISASTER
AFTER THE DISASTER THROUGH COMMUNITY-LED
LONG-TERM RECOVERY COALITIONS**

by

Alana Tornello

March 2020

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**THE LAST RESPONDERS: APPROACHING THE DISASTER AFTER
THE DISASTER THROUGH COMMUNITY-LED LONG-TERM
RECOVERY COALITIONS**

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Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
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ABSTRACT

Recovery is the disaster after the disaster, particularly for long-term recovery (LTR). Classic emergency management (EM) approaches may fail to address LTR because of its “wicked problems,” which evade traditional top-down systems. For wicked problems, scholars recommend mobilization of varied stakeholder networks. One such network exists in LTR through community-led coalitions, an organizing phenomenon coordinating nonprofits, congregations, associations, and other services to streamline diverse, critical services. The model brings together emergent groups, governmental EM, and nongovernmental EM sectors. This study examines how community-led LTR coalitions interpret and tackle LTR’s wicked problems through an in-depth qualitative analysis of long-term recovery groups after Hurricane Sandy in New York City. The research methodology includes interviews with coalition coordinators and assessments of materials relating to these coalitions. The study demonstrates the strengths and weaknesses in coalition approaches to five wicked problems derived from LTR scholarship. It offers recommendations to LTR practitioners across sectors and explores the significance of these coalitions for EM and democratic participation in recovery. This thesis applies scholarly rigor to approaches taken by coalitions in NYC to make sense of LTR’s wicked problems and collectively tackle them. It is written by and for leaders who serve survivors through the long haul of recovery—the “last responders.”

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LIST OF ACRONYMS AND ABBREVIATIONS

BK LTRG	Brooklyn Long-Term Recovery Group
BX LTRG	Bronx Long-Term Recovery Group
COAD	Community Organizations Active in Disaster
CDBG-DR	Community Development Block Grant – Disaster Recovery
DAIP	Disaster Assistance Improvement Program
DCM	disaster case management/manager
DHS	United States Department of Homeland Security
EM	emergency management
FEMA	United States Federal Emergency Management Agency
GAO	United States Government Accountability Office
HUD	United States Department of Housing and Urban Development
ICS	incident command system
LES Ready!	Lower East Side Ready! Long-Term Recovery Group
LTR	long-term recovery
LTRG/O	long-term recovery group/organization
NDRF	National Disaster Recovery Framework
NFIP	National Flood Insurance Program
NY	New York
NYC	New York City
NY City Council	New York City Council
NYCEM	New York City Emergency Management (Agency)
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYDIS	New York Disaster Interfaith Services
QRC	Queens Recovery Coalition
RSF	recovery support function
Sandy	Hurricane Sandy, officially “Super Storm Sandy”
SBA	United States Small Business Administration
SI LTRO	Staten Island Long-Term Recovery Organization

UNR	unmet needs roundtable
VAL	Voluntary Agency Liaison
VOAD	Voluntary Organizations Active in Disaster

EXECUTIVE SUMMARY

Recovery is the disaster after the disaster. The claim has been whispered around the proverbial campfires of emergency management (EM) for decades.¹ Scholars, practitioners, and survivors provide evidence to support this claim, particularly for long-term recovery (LTR)—the recovery period when “restoring, rebuilding, and reshaping the physical, social, economic, and natural environment” extends to months, years, or decades.² Classic EM approaches may fail to address LTR because its issues can be classified as “wicked problems.”³ These problems evade traditional top-down systems and planning, which is why scholars recommend rapid and sustained mobilization of various stakeholders in a network approach.⁴ This approach aims to make sense of wicked problems and identify ways to tackle them.⁵ One model takes this approach in LTR through an organizing phenomenon developed by the “last responders”—the community-based leaders who serve survivors in the long shadow cast by disaster.

Last responders across the nation have organized LTR coalitions, rapidly forming and sustaining perspectives and services from diverse stakeholders across three sectors of LTR practitioners: emergent groups, governmental EM, and nongovernmental EM. LTR

¹Thomas E. Drabek, *The Human Side of Disaster*, 2nd ed. (New York, NY: CRC Press, 2013); Claire B. Rubin, “Long-Term Recovery from Disasters: The Neglected Component of Emergency Management,” *Journal of Homeland Security and Emergency Management* 6, no. 1 (January 6, 2009), <https://doi.org/10.2202/1547-7355.1616>; Federal Emergency Management Agency, “National Preparedness Goal,” FEMA, accessed March 12, 2019, <https://www.fema.gov/national-preparedness-goal>.

² Federal Emergency Management Agency, *National Disaster Recovery Framework*, 2nd ed. (Washington, DC: Department of Homeland Security, 2016), 5; Gavin P. Smith and Dennis Wenger, “Sustainable Disaster Recovery: Operationalizing an Existing Agenda,” in *Handbook of Disaster Research*, ed. Havidán Rodríguez, Enrico L. Quarantelli, and Russell R. Dynes (New York, NY: Springer, 2007), 5, https://doi.org/10.1007/978-0-387-32353-4_14.

³ A wicked problem has multiple (or no) solutions, lacks a definitive “right or wrong” dichotomy, is hard to understand prior to finding solutions, and has an unclear stopping point, among other perplexing qualities. Horst W. J. Rittel and Melvin W. Webber, “Dilemmas in a General Theory of Planning,” *Policy Sciences* 4 (1973): 155–69.

⁴ Jeff Conklin, “Wicked Problems and Social Complexity,” in *Dialogue Mapping: Building Shared Understanding of Wicked Problems* (Chichester, England: John Wiley & Sons, 2006), 7, <http://cognexus.org>.

⁵ C. F. Kurtz and D. J. Snowden, “The New Dynamics of Strategy: Sense-Making in a Complex and Complicated World,” *IBM Systems Journal* 42, no. 3 (2003): 469, <https://doi.org/10.1147/sj.423.0462>.

coalition building has been recorded at the hyper-local level through a subset of community-led coalitions, such as long-term recovery groups (LTRGs).⁶ These community-led LTR coalitions have developed across the country to coordinate nonprofits, congregations, associations, businesses, and other service providers to streamline the delivery of disaster case management, home repair, legal aid, financial counseling, and health/mental health services, among other support groups.⁷

This study examines community-led LTR coalitions in depth, exploring how they approach wicked problems in LTR. The central inquiries of this study are the following:

- What contributes to a community-led coalition's ability to make sense out of LTR's complexity and aid decision makers in advancing recovery efforts?
- What approaches do community-led coalitions use to tackle the wicked problems of LTR?

This study employs qualitative analysis of five community-led LTR coalitions in the wake of Hurricane Sandy in NYC. The research design includes in-depth analysis of publicly available and privately shared materials produced by and about those coalitions that used the LTRG model, such as testimonies, reports, websites, presentations, and other print and digital information. The method includes five 90-minute interviews with individuals who had coordinating roles in LTRGs for a Sandy-impacted community.

The study focuses on the approaches of community-led LTR coalitions in facing five wicked problems derived from LTR scholarship. The problems identified are the: (1) union of large-scale disaster effects and the challenges and inequities of every-day emergencies; (2) race against dwindling public interest and resources; (3) barriers in helping survivors make choices between building back, building stronger, and abandoning their homes; (4) difficulty of navigating complex programs in a landscape lacking clear leadership and coordination; and (5) complex costs from the slow burn of serving

⁶ National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide* (Alexandria, VA: National Voluntary Organizations Active in Disaster, 2015), <https://www.nvoad.org/mdocs-posts/long-term-recovery-guide>.

⁷ National Voluntary Organizations Active in Disaster.

communities through years (or decades) of LTR. How community-led LTR coalitions made sense of and tackled these wicked problems form the heart of this thesis.

This study finds that LTRGs had clear approaches to making sense of the union between every-day impacts and large-scale disasters. They demonstrated clear strategies towards mitigating these dual impacts, such as ensuring that members brought experience with both disasters and community-based emergencies. LTRGs were also intentional about acknowledging and tackling dwindling attention to their cause. They leveraged the resources and attention of earlier periods of LTR while continuously assessing unmet needs to help “tell the story” of later periods. LTRGs were also skilled in coordinating across organizations and selecting coalition-oriented leaders to assess and counteract the wider landscape’s crisis of too many leaders and not enough leadership. LTRGs were less able to help communities identify a common vision for their recovery and navigate the decisions of building back, building stronger, or abandoning. They also struggled to understand and tackle the costs of slow-burning crises. Although they attempted to raise funds to support the immense costs that accrued in LTR, this effort failed to successfully overcome shortsighted funding cycles. For these problems, the limited ability for LTRGs to overcome problems arising from decisions made at high levels emerged as a common theme. These problems occurred in the design and execution of federal programs responsible for the majority of LTR funds, which for the most part did not incorporate LTRGs (or their members) into design, funding, or service coordination.

Recommendations address LTR practitioners across the sectors of emergent groups, governmental EM, and nongovernmental EM. They include the creation of a national platform by and for last responders that showcases coalition case studies and tools for leaders initiating or developing community-led LTR coalitions. Recommendations outline how governmental and nongovernmental EM professionals and scholars can support these coalitions. The study explores the significance of these coalitions in the fields of emergency management, homeland security, and broader democratic participation in disaster recovery. This thesis aims to apply scholarly rigor to approaches taken by community-led LTR coalitions in NYC to make sense of LTR’s wicked problems and collectively tackle them. It is written by a last responder, for last responders.

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DEDICATION

“We have all known the long loneliness and we have learned that the only solution is love and that love comes with community.” —Dorothy Day, The Long Loneliness

“Все счастливые семьи похожи друг на друга, каждая несчастливая семья несчастлива по-своему.” [Happy families are all alike; every unhappy family is unhappy in its own way.] —Leo Tolstoy, Anna Karenina

To the lives lost and irreparably changed among my fellow New Yorkers after Hurricane Sandy and the disasters and everyday emergencies of neighbors elsewhere

To Gladys Schweiger, last responders, and grassroots organizers who attempt to build happy “families” in their communities

And to Jacqueline and Salvatore Assenza

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ACKNOWLEDGMENTS

I wrote this thesis because hundreds of neighbors in my hometown of New York City invited me into their homes during the worst periods in their lives. I sat with them in the weeks, months, and years that followed Hurricane Sandy. They helped me intimately understand what recovery looks like after a disaster in our city. Many ideas that have informed my career have come from them. They were not only survivors, they were visionaries. They had as much to contribute to long-term recovery as practitioners.

I also wrote this because community leaders, preachers, and volunteers showed me the ropes when I returned to my home community on Staten Island to serve in recovery. They crafted their brilliant and effective work out of church basements and warehouses. They showed me what organizing looks like. I saw them preach a seemingly inconceivable future of one community of practitioners across sectors, and then make it happen. These leaders include Karen, Meg, Lyn, Tom, Paul, Daryl, Marie, Lisa, Tashonda, Jill, Brian, Craig, Will, Jonathan, Lilah, Alexa, Thomas, Reese, Steve, and Angela.

I would also not be in this program without my team at the NYC Department of Health and Mental Hygiene, along with the agency leadership who sponsored me. I owe much to Hannah, Lou, Jackie, Jackie, Jaime and the Community Partner Engagement unit. You have kept our work alive through two major disease outbreaks. Our team of mighty misfits made it through the measles; as we face the coronavirus, I pray we continue to have the energy, imagination, compassion, and unity to continue our advocacy for communities.

If I could halve this long thesis and submit for two degrees (as suggested by Glen), the second degree would go to Maya. You made this possible. You were always there—with a home-cooked meal, dance break, or reassuring word. Your sustaining of our home and lives did not go unnoticed. Thank you for modeling unconditional love. It makes us better to each other and our fellow New Yorkers. Everyone who meets you loves you for a reason. In addition, Iona, thank you for enriching my West Coast excursions with beautiful conversations and landscapes as our studies and friendship grow. Mike, Eleanor, Alyssa, Selena, and KC—thank you for your intelligence, patience, and continued kindness.

This thesis reflects my service-driven and creative family. My father, Joe, is committed to serving his community every day, including after Sandy. I am proud to call him Dad in the professional circles we share. My mother, Celeste, is a strong and creative leader whose instincts for managing tough situations remind me of the profiles of leadership in my thesis. She holds us all together. My sister, Marisa, is larger than life, with brilliance beyond my comprehension. I hope what she creates in her studies brings her as much joy as she brings us. And my grandparents, Sam and Jackie, are the most significant influence in my life and work. I love you both very much, and I hope you know that I serve because you have shown me what authentic service looks like in the ways you have cared for me and for our community. Thank you for that, and to you all, for the immense understanding, encouragement, and delicious food through two theses.

Learning should shake the tree of one's knowledge to the roots. It should jolt beliefs, biases, narratives, and ideas out of the branches and onto the grass. It should make you identify the concepts you want to take back, or leave in pursuit of something new. I am grateful to the CHDS faculty and staff who contributed to that process. My thesis committee of Lauren, Glen, and David provided excellent guidance and thoughtful consideration in this ambitious project. I have sincerely enjoyed their mentorship and conversation. Marianne, Lauren, and Dr. Bellavita provided wonderful vision and support. Heather, Mark, and Craig made us all feel at home in Monterey. And the Cohortians of 1805/1806, an exceptionally service-driven and compassionate group, were significant contributors. We've seen one another through a joyous and painful eighteen months. Thank you for humoring the town halls, for extending our learning to the fire pit, fourth floor, Trident Room, and bowling alley, and for letting me serve alongside our co-president, student council, queen, mayor, and friar. I loved every moment with you.

My undergraduate thesis explored revolution as the marriage of the real and ideal. I like the balance between action and vision, practice and thought. This closed a seven-year chapter on Sandy, helping process years of fieldwork into scholarly reflection. It also helped translate the experience of other last responders into an evidence-based reflection. It has allowed me to strive toward the aim of balancing the real and ideal. I thought this would be my last act as a last responder. I see now that it is far from the last.

I. INTRODUCTION

What are you doing here? Why would you read a thesis addressing long-term recovery—that frustrating slog that follows disaster? Long-term recovery (LTR) lives in the shadows of the domestic experiment that is homeland security. It is ever present, but ever destined to fade behind brighter bursts in attention and funding. Yet, LTR has profound impacts on Americans. It strains their minds, bodies, homes, and wallets from months to decades. It molds the future of their communities, cities, and economies. It forces examination of inequities otherwise tucked behind seemingly more urgent incidents.

In its slow burn, LTR rarely makes the agenda of policymakers. This invisibility makes it more insidious. Complex, tremendously expensive, and concurrent LTR from natural disasters has marked the 21st century. In 2019, the U.S. oversaw 106 concurrent LTR efforts totaling more than \$54 billion.¹ Among 1,162 major disaster declarations since 2000 are devastating wildfires (Butte County, California, 2018–19), unprecedented riverine flooding (Baton Rouge, Louisiana, 2016), severe tornadoes (Joplin, Missouri, 2011), and destructive massive coastal storms (Katrina, 2005; Sandy, 2012; Maria, Harvey, Irma, 2017).² What is to be done about these concurrent recoveries? Nobel Prize-winning economists Abhijit Banerjee and Esther Duflo offer a consideration in their work on poverty: rather than looking for a silver bullet, seek the coordination of many silver pellets.³ This thesis does not offer a silver bullet for LTR; instead, it collects silver pellets from leaders who fought for stronger, more meaningfully recovered communities. If that means something to you in the homeland security experiment, you are in the right place.

¹ Government Accountability Office, *Disaster Recovery: Better Monitoring of Block Grant Funds Is Needed*, GAO-19-232 (Washington, DC: Government Printing Office, 2019), 7, <https://www.gao.gov/products/GAO-16-476>.

² Federal Emergency Management Agency, “Disaster Declarations by Year,” FEMA.gov, accessed December 16, 2019, https://www.fema.gov/disasters/year?field_dv2_declaration_type_value=DR.

³ Soutik Biswas, “Abhijit Banerjee and Esther Duflo: The Nobel Couple Fighting Poverty,” BBC, October 15, 2019, sec. World News, <https://www.bbc.com/news/world-asia-india-50048519>.

A. WHEN THE SEA RISES

*“The sea rises, the light fails, lovers cling to each other, and children cling to us. The moment we cease to hold each other, the moment we break faith with one another, the sea engulfs us and the light goes out.”*⁴ James Baldwin’s words were read aloud to you, alongside over 500 residents gathered in a cold rain on Staten Island to commemorate the two-year anniversary of Hurricane Sandy in 2014. Leaders in community recovery shared similar aspirations with you throughout the evening. They tell you that relationships and coordination built after the storm need to be maintained and strengthened for the community to survive the “next Sandy.”⁵ Your organization is co-hosting the event as a member of the Staten Island Long-Term Recovery Organization (LTRO), a “coalition of community, faith-based, and national organizations” serving Sandy-impacted families in your community of Staten Island, New York City.⁶ It emerged after the storm to coordinate over 90 service providers, aiming to maximize resources and streamline recovery.⁷ You know that similar community-led LTR coalitions formed in all five boroughs of NYC.⁸ Each was founded and led by community organizations with little emergency management (EM) experience, but with participation from representatives of established EM leaders like the Federal Emergency Management Agency (FEMA) and Voluntary Organizations Active in Disaster (VOAD).⁹

⁴ James Baldwin, “Nothing Personal,” *Contributions in Black Studies* 6, no. 5 (1983): 12.

⁵ “In Sadness, Strength and Hope, Staten Island Community Marks the Second Anniversary of Sandy,” *Staten Island Advance*, October 29, 2014, http://www.silive.com/northshore/index.ssf/2014/10/in_sadness_in_strength_and_in.html; The author was present for this occasion because she was the Coordinator of the Staten Island Interfaith & Community Long-Term Recovery Organization at the time.

⁶ Staten Island Interfaith and Community Long Term Recovery Organization, “Staten Island Interfaith and Community Long Term Recovery Organization - Home,” accessed October 8, 2018, <https://sisandyhelp.org>.

⁷ Staten Island Interfaith and Community Long Term Recovery Organization.

⁸ Staten Island Interfaith and Community Long Term Recovery Organization, “Testimony of the Staten Island Interfaith and Community Long Term Recovery Organization Before the New York City Council Committee on Recovery and Resiliency,” December 16, 2014, 1, <https://sisandyhelp.org/wp-content/uploads/2014/12/Testimony-on-Community-Taskforce-for-City-Council-Com-on-Recovery-and-Resiliency-12.16.14-1.pdf>.

⁹ VOAD is an established association of organizations that “alleviate the impact of disasters” on the national, state, and local level. National Voluntary Organizations Active in Disaster, “Committees,” National VOAD, accessed October 6, 2018, <https://www.nvoad.org/voad-members/our-committees>.

In 2019, seven years after the storm, the Staten Island LTR was still hosting Hurricane Sandy (“Sandy”) anniversary events—albeit with far smaller crowds and only a handful of organizations.¹⁰ As of October 2019, some Staten Islanders were still in recovery—awaiting home elevations or bogged down in financial or legal quagmires.¹¹ Meanwhile, their neighbors in Puerto Rico completed their second year of recovery in the wake of Hurricane Maria, with coalitions commemorating the anniversary of the storm’s shocking and widespread impacts.¹² They had organized local organizations, leaders, and residents around recovery projects and “auto-gestións.”¹³ In those assemblies, they may have discussed tarps still on roofs, trauma from the storm or subsequent earthquakes, teachers’ strikes, corruption, or post-storm privatization and “disaster capitalism.”¹⁴

Like their counterparts in New York City (NYC), coalitions in Puerto Rico organized on two fronts: against the physical impacts of the storm and the inequities exacerbated by its consequences. In LTR efforts across the country, community-led coalitions formed to better organize, serve, and advocate for recovering families on both fronts.¹⁵ This study takes an in-depth examination of this organizing phenomena in disaster recovery, sketching the diversity of approaches taken by communities to address the unique physical, political, and socioeconomic needs of their LTR. In particular, it explores how community-led LTR coalitions interpret and tackle their community’s unique and complex devastation in the wake of disasters.

¹⁰ Ann Marie Barron, “Hurricane Sandy: Events Planned to Mark 7th Anniversary,” *Staten Island Advance*, October 25, 2019, <https://www.silive.com/news/2019/10/hurricane-sandy-events-planned-to-mark-7th-anniversary.html>.

¹¹ Barron.

¹² Information provided in interviews facilitated with LTR practitioners for the thesis’ analysis.

¹³ Patricia Mazzei and Alejandra Rosa, “Hurricane Maria, 2 Years Later: ‘We Want Another Puerto Rico’,” *New York Times*, September 20, 2019, sec. U.S., <https://www.nytimes.com/2019/09/20/us/puerto-rico-hurricane-maria.html>.

¹⁴ Mazzei and Rosa.

¹⁵ National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*.

B. PROBLEM STATEMENT

Recovery is the disaster after the disaster. The claim has been whispered around the proverbial campfires of EM for decades. Scholarship has framed recovery as the least understood of the five mission areas of FEMA’s National Preparedness Goal, offering an array of theories regarding its relation to EM structure, history, and culture.¹⁶ EM practitioners have also noted bewilderment, with one former FEMA Director admitting that recovery “keeps her up at night.”¹⁷ Media has extensively covered perceived recovery “neglect”—notably after Hurricane Katrina and into multiple recoveries faced by the nation today.¹⁸ Survivors provide evidence to support these perceptions, particularly for LTR—the “recovery continuum” period when “restoring, rebuilding, and reshaping the physical, social, economic, and natural environment” extends to months, years, or decades.¹⁹

Disaster survivors have described an unholy alliance of financial, legal, health, and mental health issues that contribute to and/or are caused by LTR. Numerous inputs reportedly feed the cycle, including multiyear displacements during housing/business recovery, confusion and delay while navigating multiple bureaucracies, and inequities based on race, ethnicity, income, age, disability, language access, and other

¹⁶ The five mission areas are prevention, protection, mitigation, response, and recovery. Scholarship also references the EM “cycle,” which includes: preparedness, response, recovery, and mitigation; Thomas E. Drabek, *The Human Side of Disaster*, 2nd ed. (New York, NY: CRC Press, 2013); Claire B. Rubin, “Long-Term Recovery from Disasters: The Neglected Component of Emergency Management,” *Journal of Homeland Security and Emergency Management* 6, no. 1 (January 6, 2009), <https://doi.org/10.2202/1547-7355.1616>; Federal Emergency Management Agency, “National Preparedness Goal,” FEMA, accessed March 12, 2019, <https://www.fema.gov/national-preparedness-goal>.

¹⁷ Rubin, “Long-Term Recovery from Disasters,” 10.

¹⁸ Kevin Sack and John Schwartz, “As Storms Keep Coming, FEMA Spends Billions in ‘Cycle’ of Damage and Repair,” *New York Times*, October 12, 2018, sec. U.S., <https://www.nytimes.com/2018/10/08/us/fema-disaster-recovery-climate-change.html>; Kaya Laterman, “Rebuilding After a Hurricane: Why Does It Take So Long?,” *New York Times*, October 26, 2018, sec. New York, <https://www.nytimes.com/2018/10/26/nyregion/rebuild-home-hurricane.html>.

¹⁹ Federal Emergency Management Agency, *National Disaster Recovery Framework*, 2nd ed. (Washington, DC: Department of Homeland Security, 2016), 5; Gavin P. Smith and Dennis Wenger, “Sustainable Disaster Recovery: Operationalizing an Existing Agenda,” in *Handbook of Disaster Research*, ed. Havidán Rodríguez, Enrico L. Quarantelli, and Russell R. Dynes (New York, NY: Springer, 2007), 5, https://doi.org/10.1007/978-0-387-32353-4_14.

characteristics.²⁰ LTR has been defined “as a social process shaped by both pre- and post-disaster conditions” that addresses both “the numerous challenges faced by people and the impacts of disaster on human constructs.”²¹ LTR thus officiates a union between the impacts of disasters and the realities of every-day emergencies. LTR also falls prey to declining attention and resources from media and policymakers as public interest in an incident fades.²² Its extreme costs over long but temporary periods also challenge planning.²³ And the public may question whether communities at high risk should recover, while rejecting mitigation costs to fortify these areas against future disasters.²⁴

LTR is often seen as the responsibility of governmental EM, whose agencies are often accused of inadequate recovery competencies. Over the last decade, governmental EM has designated significant resources for LTR, created the National Disaster Recovery Framework (NDRF), and initiated reforms like the Disaster Recovery Reform Act of 2018.²⁵ However, recovery resources face major bottlenecks, NDRF has low compliance,

²⁰ Daniel P. Aldrich, *Building Resilience: Social Capital in Post-Disaster Recovery* (Chicago: University of Chicago Press, 2012); Drabek, *The Human Side of Disaster*; Lauren S. Fernandez et al., “Frail Elderly as Disaster Victims: Emergency Management Strategies,” *Prehospital and Disaster Medicine* 17, no. 2 (June 2002): 67–74, <https://doi.org/10.1017/S1049023X00000200>; Laterman, “Rebuilding After a Hurricane.”

²¹ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 237.

²² Christopher Bellavita, “Changing Homeland Security: The Issue-Attention Cycle,” *Homeland Security Affairs* I, no. 1 (Summer 2005): 6, <https://www.hsdl.org/?view&did=461871>.

²³ Sack and Schwartz, “As Storms Keep Coming, FEMA Spends Billions in ‘Cycle’ of Damage and Repair”; Gavin P. Smith and Dennis Wenger, “Sustainable Disaster Recovery: Operationalizing an Existing Agenda,” in *Handbook of Disaster Research*, by Havidán Rodríguez, Enrico L. Quarantelli, and Russell R. Dynes (New York, NY: Springer New York, 2007), 234–57.

²⁴ Charles S. Perino, “Should We Stay or Should We Go Now? The Physical, Economic, Geopolitical, Social and Psychological Factors of Recovery from Catastrophic Disaster” (master’s thesis, Naval Postgraduate School, 2014), <https://www.hsdl.org/?view&did=760183>.

²⁵ Federal Emergency Management Agency, *National Disaster Recovery Framework*; Federal Emergency Management Agency, “Disaster Recovery Reform Act of 2018 Transforms Field of Emergency Management,” Federal Emergency Management Agency, accessed December 1, 2018, <https://www.fema.gov/news-release/2018/10/05/disaster-recovery-reform-act-2018-transforms-field-emergency-management>; Government Accountability Office, *Hurricane Recovery: Federal Government Provided a Range of Assistance to Nonprofits Following Hurricanes Katrina and Rita*, GAO-10-800 (Washington, DC: Government Printing Office, 2010), <https://www.gao.gov/products/GAO-10-800>.

and concurrent LTR efforts often bring damning press.²⁶ Classic EM approaches appear to fail to address the complexity of LTR. They may fail to address LTR because of the types of problems confronted in this phase of EM. LTR issues can be classified as “wicked problems”—a concept from urban planning that describes complex problems that frustrate top-down systems.²⁷ A wicked problem has multiple (or no) solutions, lacks a definitive “right or wrong” dichotomy, is hard to understand prior to finding solutions, and has an unclear stopping point, among other perplexing qualities.²⁸ Due to these characteristics, wicked problems are associated with complex scenarios that challenge classical planning and hierarchies, which is why scholars recommend dialogue among various stakeholders in a more networked approach.²⁹ Scholars recommend an increase in “the number of perspectives available to the decision makers” in order to help leaders: (1) make sense of the complexity of the wicked problem (e.g. better define its characteristics and challenges), and (2) identify approaches to tackling it (e.g. finding a solution to the problem, or at least alleviating the suffering it causes).³⁰ This approach tends to flatten hierarchies as critical players regroup into assemblages. The model has seen echoes in EM, notably the network-versus-hierarchy debate after “publicized response failures, such as Katrina,” which claims the hierarchical approach was ineffective for the complexity of recovery.³¹

There are examples of the recommended multi-stakeholder network approaches to wicked problems in LTR. Notably, the LTR *coalition* model rapidly forms, and then structurally sustains, perspectives and services from diverse stakeholders. LTR coalition building has been recorded at the hyper-local level through a subset of community-led

²⁶ Government Accountability Office, *Disaster Recovery: FEMA Needs to Assess Its Effectiveness in Implementing the National Disaster Recovery Framework*, GAO-16-476 (Washington, DC: Government Printing Office, 2016), <https://www.gao.gov/products/GAO-16-476>; Ian Swanson, “Disasters Become Big Chunk of US Deficit,” *The Hill*, October 14, 2018, <https://thehill.com/policy/finance/411215-disasters-become-big-chunk-of-us-deficit>.

²⁷ Rittel and Webber, “Dilemmas in a General Theory of Planning.”

²⁸ Rittel and Webber, 161–64.

²⁹ Conklin, “Wicked Problems and Social Complexity,” 7.

³⁰ Kurtz and Snowden, “The New Dynamics of Strategy,” 469.

³¹ Branda Nowell and Toddi Steelman, “Beyond ICS: How Should We Govern Complex Disasters in the United States?,” *Journal of Homeland Security and Emergency Management* 16, no. 2 (May 27, 2019): 1, <https://doi.org/10.1515/jhsem-2018-0067>.

coalitions that leverage a VOAD-inspired model called a Long-Term Recovery Group (LTRG).³² LTRGs have developed across the country to coordinate nonprofits, congregations, associations, businesses, and other service providers to streamline the delivery of disaster case management, home repair, legal aid, financial counseling, and health/mental health services, among other support.³³ These community-led LTR models thus present a possible instantiation of the recommended approach to making sense of, and tackling, wicked problems in LTR.

Disaster-impacted communities canvassed in the wake of urban disasters like Hurricane Sandy have produced reports of survivors claiming that they received more services and communications from community-led coalitions than from government during LTR.³⁴ Despite this potentially significant claim, community-led LTR coalitions that have served in domestic LTR have not been adequately studied as to their approaches to wicked problems. FEMA sometimes shares coalition models in the field through voluntary agency liaisons (VAL) and briefly acknowledges them in the NDRF, but there is limited scholarship on the subject.³⁵ Despite the dearth of academic coverage, there are indicators of approaches to LTR's wicked problems among community-led LTR coalitions. For example, LTRGs that arose in the wake of Hurricane Sandy in NYC often merged with community-based providers serving ongoing quotidian hazards (e.g. drug addiction) and VOAD organizations serving EM-sanctioned hazards (e.g., hurricanes).³⁶ This merger aimed to tackle LTR's union of post-disaster impacts and pre-disaster socioeconomic crises. Community organizations that led those LTRGs were embedded before the disaster

³² National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*.

³³ National Voluntary Organizations Active in Disaster.

³⁴ One canvassing effort found that 57% of residents had received assistance from “community sources” like LTRGs compared to 38% from government. Lower East Side Ready! Long-Term Recovery Group et al., *Getting LES Ready: Learning from Hurricane Sandy to Create a Community-Based Disaster Plan for the Future* (New York, NY: Lower East Side Ready! Long-Term Recovery Group, 2014), 23.

³⁵ Federal Emergency Management Agency, *National Disaster Recovery Framework*, 34–35.

³⁶ Staten Island Interfaith & Community Long-Term Recovery Organization, “Testimony of the Staten Island Interfaith and Community Long-Term Recovery Organization Before the New York City Council Committee on Recovery and Resiliency,” December 16, 2014; Emily Accamando and Erika Lindsey, “Hurricane Sandy Houses of Worship & Charitable Organizations Recovery Task Force” (New York, NY: New York City Council; Mayor’s Office of Recovery and Resiliency; New York City Emergency Management, April 2017).

and had incentive to stay through LTR, which helped reduce the loss of public support that occurs during LTR.³⁷

These community-led LTR coalitions may offer a model for tackling LTR's wicked problems and inform research on their complexity. How that looks in practice is yet to be defined. How, for example, does a coalition plan for marathon LTR while also responding to urgent needs? What kind of leaders are needed—historians, futurists, both? How does a community adjust the aperture of post-disaster planning to incorporate its complex past, present, and future needs? How does it choose between community organizing or disorganizing, as they rebuild, mitigate, disassemble, or abandon? Community-led LTR coalitions are essentially laboratories that wrestle with these questions.

This study explores how these coalitions navigate the complexities that LTR demands of people who serve survivors in the long haul—the last responders. It is written by a last responder, for the last responders. A confluence of scholarship and on-the-ground realities is offered to give LTR leaders both thoughtful and pragmatic approaches to wicked problems and to aid last responders who are developing coalitions for their communities. While they are the primary audience, governmental and nongovernmental EM agencies that provide leadership and resources to LTR are a secondary audience. It is critical that they better understand community-led LTR coalitions, given the significance of their impact on LTR. Scholars contributing to this relatively unexamined area in LTR are a tertiary audience.

C. RESEARCH QUESTIONS

- What contributes to a community-led coalition's ability to make sense of LTR's complexity and aid decision makers in advancing recovery efforts?
- What approaches are taken by community-led coalitions to tackle the wicked problems of LTR?

³⁷ Accamando and Lindsey, "Houses of Worship & Charitable Organizations Recovery Task Force."

D. RESEARCH DESIGN

The research collected for this thesis is organized around several themes. Research also addresses the general factors contributing to a coalition’s effectiveness in making sense of, and tackling, LTR’s wicked problems. In-depth case studies of community-led LTR coalitions were examined in recovery efforts after Sandy in NYC in 2012. A case-study research method fits the “exploratory” research question of this thesis because this method has been successfully executed for queries that aim to formulate “a pertinent hypothesis and propositions for further inquiry,” as classified by Robert Yin in his assessment of case-study research.³⁸ The research question ultimately asks what can be learned from post-disaster environments in the exploration of community-led coalitions’ approaches to LTR’s wicked problems. This research could not have controlled for outcomes, and thus would not have been qualified for an experiment research method; it instead focuses on past “contemporary” events, which are also classified by Yin as suitable for case-study research.³⁹

The literature review classifies “LTR” as recovery that extends into months or years, which would usually indicate a large-scale and/or complex incident. This research focuses on urban-area coastal-storm recovery because the severity of its impacts—notably flooding—on a generally large population offers a sufficient array of data from academia, press, and practitioners on LTR impacts. This thesis also addresses disasters with urban-area coastal-storm impacts because, as of 2014, more than 50% of the U.S. population (164 million Americans) lived in densely populated coastal watershed counties that contributed to 58% of the nation’s gross national product.⁴⁰ Of this population, 8.6 million Americans were vulnerable to coastal flooding (for context, 8.6 million is the 2017 population of NYC).⁴¹ That risk is expected to significantly increase—with more than “5,790 square

³⁸ Robert K. Yin, *Case Study Research: Design and Methods*, 3rd ed., vol. 5, Applied Social Research Methods Series (Thousand Oaks, CA: SAGE Publications, 2003), 6.

³⁹ Yin, 5:5–7.

⁴⁰ Susanne C. Moser et al., “Chapter 25: Coastal Zone Development and Ecosystems,” in *Climate Change Impacts in the United States: The Third National Climate Assessment* (U.S. Global Change Research Program, 2014), 581, <https://doi.org/10.7930/J0MS3QNW>.

⁴¹ Moser et al., 591.

miles and more than \$1 trillion of property and structures” at risk by 2050 from sea-level rise and coastal-storm impacts.⁴² In addition, by 2050, urban populations are expected to double and comprise two-thirds of humanity globally, with approximately 84% of the U.S. population living in urban areas.⁴³

Given these considerations, Sandy recovery efforts in NYC were selected to provide qualitative data sets because (1) NYC had widespread use of community-led LTR coalitions through the establishing of LTRGs in every borough, (2) it was a large-scale incident with at least two years of recovery, (3) it was caused by a severe coastal storm, and (4) an urban area was affected. The case studies were structured from the following tiers of research:

Tier 1: Scholarship on community-led LTR models in general, and after Sandy

Tier 2: Reports, websites, and other formally or informally published materials produced by community-led LTR coalitions

Tier 3: Interviews with participants in community-led LTR coalitions

For Tier 3, 20 potential interviewees were contacted. Participants were carefully selected based on their experience with community-led LTR coalitions. Interviewees were discovered through recommendations and contacts with the authors of relevant reports released by selected coalitions. Five phone interviews were conducted for 90 minutes each. Each interviewee represented one community-led LTR coalition. Participants were briefed about the confidentiality of their responses and the use of audio recording. Interviewee contributions remain anonymous to maintain the integrity and honesty of responses. Interviewees were asked to provide information about the coalition they served and to refrain from opinions, to the best of their ability. Interview questions aimed to provide first-hand explanations of how community-led LTR coalitions functioned, with the intent of filling gaps in the written coverage on the subject. The interviews did not solicit opinions, although bias cannot be entirely removed from discussions. The author attempted to

⁴² Moser et al., 589.

⁴³ Center for Sustainable Systems, “U.S. Cities Factsheet” (University of Michigan, August 2019), 1, <http://css.umich.edu/factsheets/us-cities-factsheet>.

remove opinions and/or highlight biases from responses that had relevant content to this thesis's primary inquiry.

Each interviewee answered the same questions. First, they named their coalition and described its mission and primary functions, in addition to their role in the coalition. After this introductory question, the interviewees answered five categories of questions drawn from an analysis of LTR's wicked problems, as derived from the literature review. While each category of questions was based on a wicked problem, the categories were not revealed to the interviewees. These questions aimed to determine how each interviewee's community-led LTR coalitions approached common problem areas, as follows:

1. **Union of Large-Scale Disaster and Every-Day Emergency:** What were five major issues (social, economic, political, or other) present in your community before the disaster that impacted its long-term recovery? What were five major strengths? Please describe how your coalition approached these issues or leveraged these strengths, if applicable.
2. **After the Spotlight: Dwindling Attention, Energy, and Resources:** How did your coalition gain and maintain buy-in throughout LTR? How is your coalition structured (e.g., hierarchy, network, hybrid)? Did you leverage any existing structures and/or technological platforms to organize? If so, what structures and/or platforms were leveraged?
3. **Impossible Choices: Build It Back, Build It Stronger, Abandon It:** Was a common vision identified for the recovery of your community? Were goals/values/points of consensus agreed upon for your coalition? How diverse were stakeholders? Were there difficulties reaching consensus?
4. **Too Many Leaders, Not Enough Leadership:** Were these sectors at the table: (1) community-based organizations, groups, or individuals "new" to disaster, (2) nongovernmental providers with disaster experience, and (3)

established EM governmental agencies? How was leadership determined / was there any competition for leadership?

5. **Costs of Slow Burning Crises:** What resources were available for this work before and after the disaster? How were resources secured and distributed among coalition members?

Answers to these queries were qualitatively analyzed to identify community-led LTR coalition approaches to making sense of and tackling LTR's wicked problems. Throughout this thesis, direct quotes are cited from these anonymous interviews. Each quote is preceded by a reference to an interviewee and is without citation.

E. ROADMAP

This chapter introduced study. Chapters 2 and 3 frame the study in relevant literature and schools of thought. Chapter 2 explores the historical and current LTR scholarship to define the focus of the study on community LTR, outlines troubling LTR trends, and identifies the five main wicked problems of LTR. Chapter 3 introduces frameworks of complexity theory (specifically, the Cynefin framework) and the multi-stakeholder coalition approach to wicked problems. The chapter introduces the primary LTR stakeholders (governmental EM, nongovernmental EM, and emergent groups) and their community-led LTR coalition work, and explores the principles of decentralized structures, social capital, grassroots organizing, and EM's whole community approach.

Chapters 4 and 5 focus on the qualitative analysis of the case study of LTRGs (a type of community-led LTR coalition) in NYC's Sandy recovery efforts. Chapter 4 introduces the landscape of Sandy LTR and its primary LTRGs, defining the stakeholders and introducing the origins, mission, and functions of the coalitions. Chapter 5 offers in-depth analyses of the interviews constituting the case study, complemented by a qualitative analysis of print and digital materials. The chapter organizes findings by each of the five wicked problems of LTR identified for the study and reflects on the legacy of LTRGs established in NYC on other jurisdictions. Chapter 6 offers ways forward for last responders. It summarizes key findings and offers recommendations for all LTR

stakeholders—split by emergent groups, governmental and nongovernmental EM, and scholars. The chapter closes with the implications of the study for cities with expansive coastal zones, for domestic EM, the homeland security landscape, and a democratic nation.

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II. THE WICKEDNESS OF LONG-TERM RECOVERY

An exploration of community-led LTR coalitions as an approach to the wickedness of LTR calls for a confluence of several areas of inquiry. This chapter focuses on (1) the development of recovery—especially LTR—in EM scholarship and the shift towards community efforts, (2) the categorization of LTR’s common problems by practitioners and scholars, and (3) the classification of these problems as wicked. The literature introduces the concept of community-led LTR coalitions as a potential model for the sensemaking and tackling of LTR’s wicked problems.

A. DEFINING COMMUNITY LONG-TERM RECOVERY

Disaster scholarship is less prolific for recovery, especially LTR. A cadre of scholars nonetheless persist in examining LTR. Domestic discourse on recovery writ large has accompanied the evolution of EM, arising predominantly after the introduction of the EM cycle in the 1970s.⁴⁴ Early EM scholars such as Paul Friesma, Eugene Haas, and Peter Rossi focused instead on reconstruction to examine the long-term aftermath of disaster.⁴⁵ By the 1980s, scholarship began to use term “recovery” to move beyond the rehabilitation of physical structures and into the rebuilding of social, cultural, and economic systems, as explored by Claire Rubin, Enrico Quarantelli, and Thomas Drabek.⁴⁶ Recovery discourse also moved away from the concept of building back in favor of building back with “resilience.”⁴⁷ In the 2000s, scholars expanded the writings on recovery in major EM works—such as Gavin Smith and Dennis Wenger in the “Handbook on Disaster Research”

⁴⁴ Rubin, “Long Term Recovery from Disasters,” 2.

⁴⁵ H. Paul Friesma, *Aftermath: Communities after Natural Disaster* (Thousand Oaks, CA: SAGE Publications, 1979); J. Eugene Haas, *Reconstruction Following Disaster* (Boston, MA: MIT Press, 1977); Peter Rossi and Wright, James D, *After the Clean-Up: Long-Range Effects of Natural Disasters* (Thousand Oaks, CA: SAGE Publications, 1979).

⁴⁶ Thomas E. Drabek and William Key, *Conquering Disaster: Family Recovery and Long Term Consequences* (New York, NY: Irvington Press, 1984); Enrico L. Quarantelli, *The Disaster Recovery Process: What We Know and Do Not Know from Research*, 286 (Newark, DE: University of Delaware Disaster Research Center, 1999); Claire B. Rubin, Martin D. Saperstein, and Daniel G. Barbee, “Community Recovery from a Major Natural Disaster,” *FHMI Publications*, no. 87 (1985): 298.

⁴⁷ Robert Bach, ed., *Strategies for Supporting Community Resilience: Multinational Experiences*, vol. 41 (Stockholm: CRISMART, The Swedish Defence University, 2015).

and Rubin in “Emergency Management: The American Experience.”⁴⁸ This era also saw more scholarship out of urban planning—notably from the American Planning Association, via Robert Olshansky and Laurie Johnson, who contributed through the historical tracking of recovery planning, funding, and governance on the federal, state, and local levels.⁴⁹ This scholarship represent several advances in LTR literature; however, there was little research on recovery into the mid-2010s, when Wenger and Smith claimed that “disaster recovery represents the least understood aspect of emergency management, from the standpoint of both the research communities and the practitioners.”⁵⁰ Thus, while the study of LTR saw growth in the last decades, recovery remains mostly underexplored.

As it advanced, scholarship further defined recovery. One categorization is by incident, which classifies recovery needs based on disaster type—generally (e.g., natural, manmade), specifically (e.g. coastal storm, earthquake, fire), by geography (e.g., urban, suburban, rural), and by the size, depth, and complexity of impact (e.g., fatalities, damaged properties, impact on air quality).⁵¹ Another categorization is by duration—often framing recovery into a continuum of “short-term (days),” “intermediate (weeks-months),” and “long-term (months-years),” as outlined in Figure 1.⁵² Yet another categorization is by focus of recovery efforts, including recovery of infrastructure, housing, economy, health and social services, natural and cultural resources, and community.⁵³ Finally, categorization by level generally places the focus on the recovery of “the micro (household, business, and neighborhood) to mid-range (community, region) to macro (societal) levels.”⁵⁴ Recovery of community is perhaps the most difficult to capture within these

⁴⁸ Smith and Wenger, “Sustainable Disaster Recovery,” 2007; Claire B. Rubin, ed., *Emergency Management: The American Experience, 1900–2010*, 2nd ed. (Boca Raton, FL: CRC Press, 2012).

⁴⁹ Robert B. Olshansky and Laurie A. Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” *Journal of the American Planning Association* 80, no. 4 (September 2014): 293–304, <https://doi.org/10.1080/01944363.2014.967710>.

⁵⁰ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 234.

⁵¹ Smith and Wenger, “Sustainable Disaster Recovery,” 2007; Rubin, “Long Term Recovery from Disasters.”

⁵² Federal Emergency Management Agency, *National Disaster Recovery Framework*.

⁵³ Federal Emergency Management Agency, *National Disaster Recovery Framework*.

⁵⁴ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 245.

categories, as it can be considered both a focus and level of recovery (perhaps more so the latter, because it tends to span several focuses of recovery efforts). Regardless of classification, community recovery generally refers to the holistic physical, economic, social, cultural, and/or spiritual restoration of a group with diverse characteristics that shares a common geography or affinity.⁵⁵ Of the various durations, focuses, and levels of recovery, scholars frequently study “long-term” and “community” in tandem. That intersection is explored in this study for the disaster type of coastal storms in urban areas.

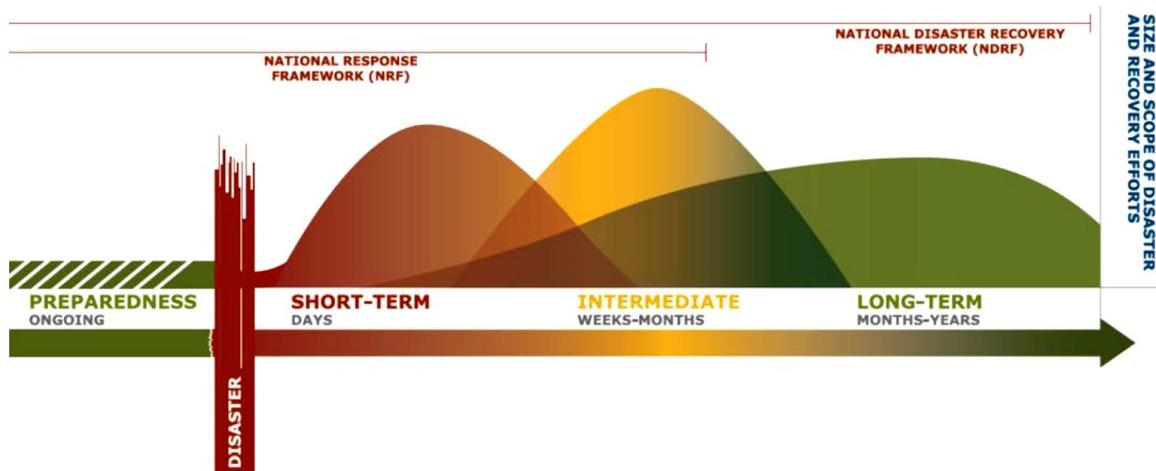


Figure 1. Phases of Recovery in the NDRF. Source: FEMA (2016).⁵⁶

The correlation with “long-term” and “community” recovery may relate to a wider shift in EM. Robert Bach claims that in the period after 9/11, EM focused on models that “minimized the role for community,” but that Hurricane Katrina’s LTR failures compelled U.S. leaders to “move toward incorporating local communities into a decentralized, public engagement strategy” with “community-based strategies” becoming “clear and urgent.”⁵⁷ Smith and Wenger reiterate this finding, claiming that “recovery practice traditionally emphasizes the management of federal assistance programs,” but recommending a

⁵⁵ Smith and Wenger, “Sustainable Disaster Recovery,” 2007; Rubin, Saperstein, and Barbee, “Community Recovery from a Major Natural Disaster.”

⁵⁶ Federal Emergency Management Agency, *National Disaster Recovery Framework*.

⁵⁷ Bach, *Strategies for Supporting Community Resilience*, 41:22.

“systematic identification of community needs and the development of a comprehensive strategy for long-term recovery and reconstruction.”⁵⁸ They also clarify this choice, and the trend in scholarship, that defends the community as the center of recovery:

The focus on the community is based on the traditional notion of communities as social institutions that solve problems inherent in geographically confined localities. It is that arrangement of social units and systems whose activities, be they consensual or conflictive, form the social, economic, political, built, and natural environmental contexts for daily existence. It is also that social arrangement, because of legal mandate and issues of shared governance, that most directly impacts the achievement of sustainable, community disaster recovery.⁵⁹

Smith and Wenger describe several important complexities of community recovery—notably its placement as a more localized unit of analysis and its complexity as a diverse microcosm of greater recovery trends across human, natural, and built environments. Here, solutions are implemented, if not also devised, and thus community recovery providers a critical bridge between theory and reality.⁶⁰

Community LTR often accompanies large-scale disasters where “much greater citizen engagement was needed to meet the hazards and vulnerabilities associated with more complex and intertwined dimensions of large-scale risk.”⁶¹ A body of scholarship recognizes community leadership from “individuals, nonprofits, small businesses, and groups” as the primary driver of LTR, even though they are “underutilized, ill-coordinated with others, or ignored.”⁶² The causes cited for this include the “paternalistic and inaccurate assumption that federal and state governments are the sources for most of the resources needed post-disaster.”⁶³ A diverse array of domestic case studies on community recovery from natural disasters reiterates this claim—notably by Claire Rubin, Lucy Arendt, and

⁵⁸ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 239.

⁵⁹ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 246.

⁶⁰ Smith and Wenger, 246.

⁶¹ Bach, *Strategies for Supporting Community Resilience*, 41:19.

⁶² Gavin P. Smith and Thomas Birkland, “Building a Theory of Recovery: Institutional Dimensions,” *International Journal of Mass Emergencies and Disasters* 30, no. 2 (August 2012): 147–70.

⁶³ Smith and Birkland.

Daniel Alesch.⁶⁴ A series of informative studies drawn from international cases—such as works by Fatih Demiroz, Qian Hu, Emmanuel Raju, Per Becker, and Henrik Tehler—also highlights the necessity for community-led approaches to LTR.⁶⁵

B. TROUBLING TRENDS IN LONG-TERM RECOVERY

LTR faces a myriad of problems that have traditionally befuddled EM practitioners attempting to carry out planning for LTR. The literature on community LTR in particular covers a wide range of problems, which are categorized for this study into five major problem areas. These problem areas derived from a review of relevant LTR literature established benchmarks that inform the qualitative analysis portion of this thesis.

1. Union of Large-Scale Disaster and Every-Day Emergency

The union of large-scale disaster and every-day emergencies creates complex community and individual needs in LTR. Recognition of this dynamic in domestic recovery has grown in the wake of Hurricane Katrina and the various large-scale disasters of the 21st century.⁶⁶ But even classic case studies of community recovery, such as an assessment of recovery from a 1976 earthquake in northern Italy completed by Robert Geipel, acknowledged the “cultural, social, and economic conditions that shape the path to recovery.”⁶⁷ In that 1976 study, class inequities between wealthy merchants and financially struggling seniors determined the pace and totality of recovery for each subset, with

⁶⁴ Rubin, Saperstein, and Barbee, “Community Recovery from a Major Natural Disaster”; Lucy A. Arendt and Daniel J. Alesch, *Long-Term Community Recovery from Natural Disasters* (Washington, DC: CRC Press, 2014), <https://doi.org/10.1201/b17677>.

⁶⁵ Fatih Demiroz and Qian Hu, “The Role of Nonprofits and Civil Society in Post-Disaster Recovery and Development,” in *Disaster and Development: Examining Global Issues and Cases*, ed. Naim Kapucu and Kuotsai Tom Liou, Environmental Hazards (Cham: Springer International Publishing, 2014), 317–30, https://doi.org/10.1007/978-3-319-04468-2_18; Emmanuel Raju, Per Becker, and Henrik Tehler, “Exploring Interdependencies and Common Goals in Disaster Recovery Coordination,” *Procedia Engineering* 212 (2018): 1002–9, <https://doi.org/10.1016/j.proeng.2018.01.129>.

⁶⁶ Rachel E. Luft, “Beyond Disaster Exceptionalism: Social Movement Developments in New Orleans after Hurricane Katrina,” *American Quarterly* 61, no. 3 (2009): 499–527; Smith and Wenger, “Sustainable Disaster Recovery,” 2007; Jeffrey Stout, *Blessed Are the Organized: Grassroots Democracy in America* (Princeton, NJ: Princeton University Press, 2010), <https://muse.jhu.edu/book/36291>; Laurie A Johnson and Robert B Olshansky, “The Road to Recovery: Governing Post-Disaster Reconstruction,” n.d., 8.

⁶⁷ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 235.

recovery of the latter requiring coordinated and focused additional social services.⁶⁸ This narrative has carried through to the LTR of major contemporary domestic disasters from Hurricane Katrina to Hurricane Maria. The significant problem with LTR is thus framed as a centrifuge of (1) impacts of the large-scale disaster (e.g. displacement from a flooded home, waiting for insurance payouts, etc.), (2) inequities based on race, income, age, disability, language, gender, and sexual orientation (e.g. generational wealth, access to information, discrimination in services, etc.), and (3) financial, legal, health, mental health, immigration status, addiction, and other strains and shocks (pre-existing or not) that accrue as survivors navigate LTR.

This merger presents unique challenges to EM, but contains issue areas that fall within the scope of many nongovernmental human services organizations. These organizations already serve ongoing, seemingly quotidian hazards framed outside of the sanctioned hazards of EM.⁶⁹ For human services organizations that participate in disaster recovery, the main differences in service delivery are the immense scale of need and the requirement to navigate new partnerships and bureaucracies to access limited resources.⁷⁰ In focusing on these organizations and their pre- and post-disaster competencies, scholars like Luft reject “disaster exceptionalism” and attempt to “recontextualize threat, hazard, and trauma in the daily conditions,” reframing disaster as a different “degree” of struggle that demonstrates the “ongoing experience of social inequality for many in the United States.”⁷¹ One approach to this dynamic has been the study of grassroots mobilizing, or “crisis” organizing, and its attempts to look at a more holistic LTR.⁷²

This union between disaster-specific and non-disaster-specific needs also makes it more challenging to identify metrics for progress, including thresholds for an end to

⁶⁸ Smith and Wenger, 235.

⁶⁹ Matthew J. Egan and Gabor H. Tischler, “The National Voluntary Organizations Active in Disaster Relief and Disaster Assistance Missions: An Approach to Better Collaboration with the Public Sector in Post-Disaster Operations,” *Risk, Hazards & Crisis in Public Policy* 1, no. 2 (January 1, 2010): 63–96, <https://doi.org/10.2202/1944-4079.1029>.

⁷⁰ Egan and Tischler; Bach, *Strategies for Supporting Community Resilience*.

⁷¹ Luft, “Beyond Disaster Exceptionalism,” 4.

⁷² Stout, *Blessed Are the Organized*; Luft, “Beyond Disaster Exceptionalism.”

recovery. As Olshansky and Johnson assert, recovery has an “ill-defined endpoint and no agreed-upon measure of success,” with most literature acknowledging that recovery work is transferred at various points in LTR to organizations that manage day-to-day services.⁷³ The lack of an end state can be seen as problematic, or as complementary to the concepts of community resilience, via the continuous building of strength to resist and recover from both disaster-specific and wider social issues.⁷⁴ Through a resilience lens, LTR blends into mitigation and preparedness, and an end date is less relevant because the process is instead a cycle. However, although this concept may appeal to scholars, LTR metrics for progress and for completion can be critical for communities.⁷⁵ The framing of LTR as a tango between disaster and every-day emergency without a clear end state can make it impossible for communities to experience closure from their disaster experience—which may end up embedding itself into their daily struggles without resolution.

The irony of LTR is that it can also be a unique opportunity for communities to take advantage of recovery-designated resources to address wider needs. Scholars have identified distinct windows of opportunity in which a community can not only rectify disaster-triggered issues, but also designate the flow of resources into their community towards pre-existing and/or exacerbated every-day emergencies.⁷⁶ The ability, however, to take advantage of these resources is often tragically lost because the window of opportunity to use an unprecedented flow of resources into a community is missed. Olshansky and Johnson have explored this phenomenon, describing LTR’s “time compression” of “urban

⁷³ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 294.

⁷⁴ Bach, *Strategies for Supporting Community Resilience*.

⁷⁵ Stephen Platt and Emily So, “Speed or Deliberation: A Comparison of Post-Disaster Recovery in Japan, Turkey, and Chile,” *Disasters* 41, no. 4 (October 1, 2017): 696–727, <https://doi.org/10.1111/dis.12219>.

⁷⁶ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters”; Platt and So, “Speed or Deliberation”; Stephen Platt, “Planning Recovery and Reconstruction After the 2010 Maule Earthquake and Tsunami in Chile,” in *Urban Resilience for Risk and Adaptation Governance*, ed. Grazia Brunetta et al. (Cham: Springer International Publishing, 2019), 285–304, https://doi.org/10.1007/978-3-319-76944-8_16.

development activities in time and in a limited space.”⁷⁷ They further expound on their definition of time compression as a critical element of LTR:

Time compression is what distinguishes post-disaster recovery from the normal processes of urban development, and it explains everything that is unique about recovery. The characteristics of time compression explain why the need for planning—collection and management of data, involvement of multiple stakeholders, rapid consideration of multiple courses of action, venues for collaboration—is elevated after disasters.⁷⁸

This time compression creates an often tiny but critical period of opportunity for diverse stakeholders from local governmental and nongovernmental bodies to collectively identify a vision for their recovered community. Although time for planning is important, the time available for a community to deliberate about how to maximally serve disaster impacts and inequities may be inversely related to the speed of recovery services. This balance between speed and deliberation has been used as a litmus test of recovery.⁷⁹ For example, in one comparative case study of recovery in Japan, Turkey, and Chile, the authors gauged how well each balanced the dual desires to “rebuild as quickly as possible” and “maximize the opportunities for improvement that disasters provide.”⁸⁰ In Turkey after a 2011 earthquake, the study found little engagement with stakeholders and very limited time for deliberation—resulting in a “speedy” recovery, but unsustainable structures that had not addressed inequities. In Japan after the 2011 tsunami-earthquake, on the other hand, the study documented much greater deliberation with community stakeholders around a sustainable vision, but delays in service delivery. In one of the rare case studies that lauds a recovery effort, Chile was praised for balancing deliberation and speed in their recovery after a 2010 tsunami-earthquake. A smaller window of opportunity was set for

⁷⁷ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 173.

⁷⁸ Olshansky and Johnson, 294.

⁷⁹ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters”; Platt and So, “Speed or Deliberation.”

⁸⁰ Platt and So, “Speed or Deliberation,” 1.

deliberation on recovery outcomes, but stakeholders were rigorously engaged, with deadlines clearly set between government and community to collectively manage speed.⁸¹

The scholarship discusses a “theory of sustainable community disaster recovery,” which has been in development for several decades and aims to balance the (1) deliberation with communities to address disaster impacts in the context of its inequities, and (2) speed of LTR in rectifying disaster impacts by achieving clear outcomes like ending displacement, securing safe and sanitary housing, and disbursing critical resources in a timely and ordered delivery.⁸² It recommends combining commonly classic EM metrics for recovery with unorthodox social service metrics; facilitating recovery planning that balances immediate and long-term needs; and balancing distribution of funding across practitioners representing a diversity of fields. These efforts aim to professionalize LTR with a foundational understanding of how disaster impacts classically met by EM enmesh with emergency impacts met by social work, public health, and other human services fields.

2. After the Spotlight: Dwindling Attention, Energy, and Resources

Attention, energy, and resources for LTR tend to wane as the incident fades from public view—falling prey to the ebbs and flow of domestic public policy, media, and the wider zeitgeist. This experience in LTR is reflected in the issue-attention cycle, a concept introduced by Anthony Downs in 1972 to describe how “public perception of most ‘crises’ in American domestic life does not reflect changes in real conditions as much as it reflects the operation of a systematic cycle of heightening public interest and then increasing boredom with major issues.”⁸³ The issue-attention cycle claims that issues follow five stages: “pre-problem, alarmed discovery, awareness of the costs of making significant progress, gradual decline of intense public interest, and a post-problem stage,” as highlighted in Figure 2.⁸⁴ The cycle can be deadly for LTR, which inherently falls between

⁸¹ Platt and So, “Speed or Deliberation.”

⁸² Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 245.

⁸³ Anthony Downs, “Up and Down with Ecology: The ‘Issue-Attention’ Cycle,” *The Public Interest* 28 (1972): 39.

⁸⁴ Downs, “Up and Down with Ecology: The ‘Issue-Attention’ Cycle.”

the “awareness of cost of making significant progress” and the “gradual decline of intense public interest.”⁸⁵ This is particularly concerning when a disaster occurs in temporal proximity to other disasters, with resources and attention quickly turning from the “old” incident to the breaking incident. In these less favorable stages, dwindling attention but remaining need disproportionately impacts minority subgroups in the population.⁸⁶ This period of lessened attention is labeled as an “enthusiasm gap” in Figure 2.⁸⁷

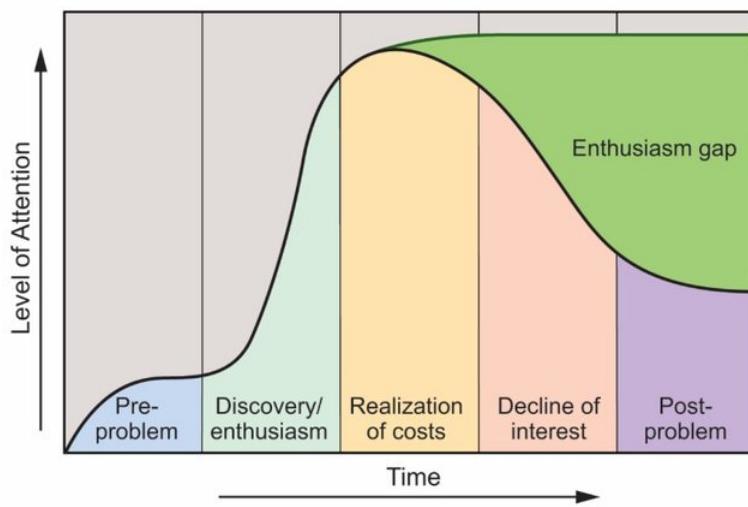


Figure 2. Phases of the Issue-Attention Cycle. Source: Haase and Davis (2017); Adapted from Downs (1972).⁸⁸

The Issue-Attention Cycle not only weakens LTR because of external resources and media. LTR also suffers lapses in community-based energy, focus, and attention. For example, Drabek created profiles of the types of individuals present during the immediate recovery phase, including early local leaders who burn out and lose energy for continuing

⁸⁵ Bellavita, “Changing Homeland Security: The Issue-Attention Cycle,” 1.

⁸⁶ Downs, “Up and Down with Ecology: The ‘Issue-Attention’ Cycle.”

⁸⁷ Diane Haase and Anthony S. Davis, “Developing and Supporting Quality Nursery Facilities and Staff Are Necessary to Meet Global Forest and Landscape Restoration Needs,” *REFORESTA*, no. 4 (December 30, 2017): 69–93, <https://doi.org/10.21750/REFOR.4.06.45>.

⁸⁸ Haase and Davis; Downs, “Up and Down with Ecology: The ‘Issue-Attention’ Cycle.”

into the long term.⁸⁹ Drabek claims that much initial momentum and innovative leadership dissipates during the transitional phase between immediate recovery and LTR, which he affectionately labels as the “bitch phase.”⁹⁰ This phase is when families continually ask “when can we go home?” while the answer to this critical question appears increasingly unclear.⁹¹ In this phase, practitioners experience both compassion fatigue and bureaucracy fatigue from extended periods of intense work and seemingly unanswerable questions.

Personal accounts often describe LTR as a period with simultaneous “fogs” in decision making: (1) affected individuals are still processing the shocks of the initial disaster impacts while (2) they are recognizing that the hero-responders—and their resources and attention—are fading or gone, leaving survivors alone to face the stark realities of the immense and costly LTR ahead.⁹² This predicament is the cruelty of Drabek’s bitch phase: as time passes, displacement and disaster-induced delayed emergencies (e.g. vacant houses with burst frozen pipes) compound. They incur increasing costs, even as resources rapidly and inevitably dwindle. This is the curse that weaves through much of LTR, and the quintessential manifestation of the Issue-Attention Cycle.

3. Impossible Choices: Build It Back, Build It Stronger, Abandon It

During LTR, communities face the impossible choices of building back, building stronger, or abandoning their homes. LTR does not necessarily connote the return to pre-disaster conditions; on the contrary, the definition for LTR used for this analysis comes from Smith and Wenger’s “sustainable disaster recovery,” which includes “restoring, rebuilding, and reshaping the physical, social, economic, and natural environment.”⁹³ LTR scholarship usually includes the ideal of reshaping an impacted community into a more resilient place, with scholars mostly agreeing that recovery “is never a return to the

⁸⁹ Drabek, *The Human Side of Disaster*, 170–71.

⁹⁰ Drabek, 184.

⁹¹ Drabek, 184.

⁹² Drabek, *The Human Side of Disaster*; Luft, “Beyond Disaster Exceptionalism.”

⁹³ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 237.

conditions that existed before the event.”⁹⁴ It thus can align with disaster resilience—the concept in EM defined as “the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events.”⁹⁵ There are also more operational definitions:

The goal is to assist communities in withstanding an extreme event without suffering devastating losses and without requiring a great deal of outside assistance. The impacted communities survive and continue to function; they might bend from disaster stresses, but they do not break. [...] Resilience is the capacity to absorb severe shock and return to a desired state following a disaster. It involves technical, organizational, social, and economic dimensions. It is fostered not only by government, but also by individual, organization, and business actions.⁹⁶

For this analysis, LTR contains the concepts of resilience. Although recovery is sometimes pitted against resilience, or even replaced by it, the two can be complementary but distinct concepts.⁹⁷ Their relationship depends on whether the LTR chosen by the community primarily focuses on restoration or redevelopment.⁹⁸ Scholars and practitioners have called for shifts from the restoration-based “build it back” mentality of traditional recovery programs to the redevelopment-based “build back better” ideal of the resilience movement.⁹⁹ The latter aims to embed holistic mitigation and preparedness into the rehabilitation of housing, communities, and livelihoods. A possible dichotomy between building back and building stronger should not be interpreted as LTR versus resilience. Rather, LTR can bring a community through a recovery planning process in which households may choose, for example, a faster, cheaper, but less resilient LTR over a slower, expensive, but more resilient LTR. LTR should not be synonymous with resilience, lest the

⁹⁴ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 294.

⁹⁵ James C. Schwab et al., “Planning for Post-Disaster Recovery: Next Generation,” Planning Advisory Service Reports (Chicago, IL: APA, December 2014), 6, https://www.fema.gov/media-library-data/1425503479190-22edb246b925ba41104b7d38eddcc207f/APA_PAS_576.pdf.

⁹⁶ Schwab et al., 21.

⁹⁷ Schwab et al., “Planning for Post-Disaster Recovery”; Bach, *Strategies for Supporting Community Resilience*.

⁹⁸ Schwab et al., “Planning for Post-Disaster Recovery,” 52.

⁹⁹ Schwab et al., “Planning for Post-Disaster Recovery”; Platt and So, “Speed or Deliberation”; Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters.”

urgent and specific post-disaster needs of recovery be lost in the latter more amorphous concept. Specific competencies needed for LTR are not encompassed in the broader concept of resilience. For example, getting thousands of displaced persons back into sanitary and safe housing in a humane timeframe is LTR, but not necessarily resilience. A resilient LTR, however, means that post-displacement housing and the affected person and community are also more equipped for the next incident. Resilient LTR thus facilitates recovery “in a manner that results in recognizable (social, economic, and environmental) improvements over those conditions that were prevalent prior to the event.”¹⁰⁰

In addition to the choices of building back, or building stronger, LTR can also include the choice of abandoning individual lots, blocks, or entire geographic areas. LTR often now includes the options of buyouts or acquisitions for redevelopment by government of disaster-impacted land for housing, commercial, and public space, or left to return to nature.¹⁰¹ For the option of abandoning disaster-impacted land and housing, decisions are often made on an individual basis, even though they tend to be more financially lucrative and cohesive for community members when made on a community level.¹⁰² For example, communities have chosen to completely relocate out of flood zones to higher ground, like the Quinault Indian Nation village in Washington State, in anticipation of possible effects of the Cascadia fault.¹⁰³ Others have taken a deal for a neighborhood-wide buyout in which the community selects to disband, such as the Oakwood neighborhood of Staten Island in NYC in the wake of Hurricane Sandy.¹⁰⁴ Diverse LTR examples illustrate communities choosing to recover together outside their original geographic location or de-organizing to support individual recovery.

¹⁰⁰ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 238.

¹⁰¹ Johnson and Olshansky, “The Road to Recovery: Governing Post-Disaster Reconstruction”; Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters”; Drabek, *The Human Side of Disaster*.

¹⁰² Perino, “Should We Stay or Should We Go Now? The Physical, Economic, Geopolitical, Social and Psychological Factors of Recovery from Catastrophic Disaster.”

¹⁰³ United States Environmental Protection Agency, “Quinault Indian Nation Plans for Relocation,” Overviews and Factsheets, EPA.gov, April 15, 2016, <https://www.epa.gov/arc-x/quinault-indian-nation-plans-relocation>.

¹⁰⁴ Peter Szekely, “New York Lets Neighborhood Return to Nature to Guard Against Storms,” *Reuters*, October 27, 2017, <https://www.reuters.com/article/us-usa-storm-sandy-idUSKBN1CW19G>.

Although the choices of building stronger or abandonment may be preferable from the standpoint of individual or community resilience, building back is often still the preference for recovering communities seeking the comfort and stability that they perceive will come from going back to the ways things were. In Geipel’s classic study of community decision-making in the wake of an earthquake in the Italian region of Friuli in 1976, he found that “citizens envisioned a ‘post-disaster plan’ emphasizing a return to normalcy, which competed with [that of] administrators, planners, and other experts who proposed change.”¹⁰⁵ The people of Friuli exhibited such a “strong commitment to place,” that after another earthquake hit their homes just a few months later, “only 1.6% of the 6,568 surveyed were interested in leaving permanently or for a short time.”¹⁰⁶ A similar phenomenon repeated itself in that same year in the U.S. after floods in Denver, Colorado, when a survey of impacted residents found that “one-half (53%) of the victims were unwilling to sell their land to the government” even after having experienced 144 deaths and unprecedented damage.¹⁰⁷ This perception tends to remain throughout LTR. For example, seven years after the destruction of Sandy, residents of Staten Island are still advocating lower flood-insurance rates for residences in high-risk flood zones that have not completed mitigation such as home elevations. As of November 2019, local elected officials had made progress in fighting flood-insurance rate increases—a move unfortunately incentivizing at-risk residents to stay without requisite mitigations.¹⁰⁸

The tendency towards building back is highly concerning; however, LTR efforts often value the self-determination of communities. Local elected officials are subsequently called to protect these options, though they also have incentives to encourage residents to remain to preserve their constituency. In addition, the choice of building back may not only

¹⁰⁵ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 235.

¹⁰⁶ Drabek, *The Human Side of Disaster*, 185.

¹⁰⁷ Drabek, 185.

¹⁰⁸ Office of United States Congressman Max Rose, “Rose Presses FEMA on Proposed Flood Insurance Program That Could Devastate Homeowners,” MaxRose.House.Gov, August 22, 2019, <https://maxrose.house.gov/news/documentsingle.aspx?DocumentID=2328>; Paul Liotta, “FEMA Delays Flood Insurance Plan to 2021, Will Allow for One-Time Rollout,” *Staten Island Advance*, November 7, 2019, <https://www.silive.com/news/2019/11/fema-delays-flood-insurance-plan-to-2021-will-allow-for-one-time-rollout.html>.

be based on psychological, economic, and cultural connections to place: the choices of building back better or abandoning are sometimes not financially, legally, or physically feasible for households confronted with higher upfront mitigation costs, potentially longer temporary displacement, health issues, or permanent relocation expenses.¹⁰⁹ It may not be feasible to provide the ideals of building back better or abandoning home to current or future Americans navigating LTR.

Scholars mostly acknowledge that “different paths to recovery” should be offered as choices to impacted communities.¹¹⁰ However, communities are “often constrained because of a lack of awareness of the options before them and the failure to involve a wide range of stakeholders in the decision-making process.”¹¹¹ Regardless of the value—or existence—of these choices, a primary contributor to slower and more devastating LTR is the inability for communities and individuals to agree upon goals and a common end state for their recovery. As Smith and Wenger argue, “the failure to establish clear recovery goals and an effective implementation strategy can lead to shoddy reconstruction, a loss of jobs, a reduction in affordable housing stock, missed opportunities to incorporate mitigation into the rebuilding process, and an inability to assist the neediest to recover.”¹¹² The inability to identify a common end state affects not only the pace and quality of a community’s recovery; communities can also waste or miss critical resources from early fissures in decision making around LTR’s end state.¹¹³ Guiding impacted individuals through their choices of recovery and towards a common vision in the exhausting wake of disaster is incredibly difficult. Working through these choices with high-risk communities *before* disasters in community-wide planning has value because the community is most

¹⁰⁹ Perino, “Should We Stay or Should We Go Now? The Physical, Economic, Geopolitical, Social and Psychological Factors of Recovery from Catastrophic Disaster”; Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters.”

¹¹⁰ Smith and Wenger, “Sustainable Disaster Recovery,” 2007; Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters”; Drabek, *The Human Side of Disaster*; Rubin, “Long Term Recovery from Disasters.”

¹¹¹ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 239.

¹¹² Smith and Wenger, 239.

¹¹³ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters”; Smith and Wenger, “Sustainable Disaster Recovery,” 2007.

capable of making responsible and unified decisions about how they would want to use recovery resources in the wake of disaster. However, given the trends of the Issue-Attention Cycle, planning prior to a disaster may be the most difficult period to galvanize this change.

4. Too Many Leaders, Not Enough Leadership

During LTR, a wide array of players may rise in the governmental, nongovernmental, and unaffiliated realms, but the leadership is often unclear. Specifically, leadership in LTR is used here to describe entities that can lead (1) coordination between the various players in a post-disaster landscape and (2) unified planning principles and recovery visions that mobilize disparate entities towards one goal. A common theme in scholarship is the shirking of responsibilities in regard to recovery writ large, with a recognition that “much valuable time is wasted after a disaster determining who will take charge of the reconstruction agenda and how lines of responsibility for implementing that agenda will be organized.”¹¹⁴ This failure in identifying and implementing goals and roles for leaders across these sectors is recognized as a gap for both scholars and practitioners:

When compared to the other widely recognized phases of emergency management, that is, preparedness, response, and mitigation, scholars have yet to address fundamental questions, while practitioners have failed to establish an integrated policy framework or utilize readily available tools to improve disaster recovery outcomes.¹¹⁵

This poor coordination can have real impacts on disaster survivors. Scholars consider Hurricane Katrina to be the prime case study in poor interagency coordination and leadership, which can be seen even in the very frontlines of the disaster assistance process. In the wake of Hurricane Katrina, disaster assistance application processes “were fragmented and slow,” survivors were often unaware of their eligibility across programs, and applicants “had to provide the same information numerous times, creating unnecessary burdens and delays for individuals struggling with the loss of their homes, businesses and

¹¹⁴ Schwab et al., “Planning for Post-Disaster Recovery,” 47.

¹¹⁵ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 234.

loved ones.”¹¹⁶ This prompted the Post Katrina Emergency Management Reform Act of 2006, in which Congress “required FEMA to create a national disaster recovery strategy,” which eventually became the NDRF.¹¹⁷

For governmental EM, the NDRF is the attempt to create a framework that delineates LTR roles across agencies through six recovery support functions (RSFs), including the “community planning and capacity building” assigned to the Department of Homeland Security (DHS)/FEMA, as shown in Figure 3.¹¹⁸ As noted by the APA, the NDRF is “a milestone as the first statement of national recovery policy” because it recognizes that the “key to successful recovery is the need for multilevel coordination and local empowerment and partnership.”¹¹⁹ But as mentioned, since its 2011 creation, there has been very limited implementation of the NDRF, especially at the state and local level.¹²⁰ Compliance varies among the types of governmental agencies tagged to RSFs. For example, an assessment of state public health agencies found “very low compliance” with the NDRF and related guidance from the Centers for Disease Control and Prevention.¹²¹ The study assessed whether public health agencies complied with recovery components, finding that 79% of components resulted in a score of 0 (including no agencies with a recovery plan).¹²² In a 2016 GAO assessment, state EM agencies were not faring much better: four out of five states said they “did not understand significant aspects of the

¹¹⁶ Accenture Partnership for Public Service, “Serving Citizens: Strategies for Customer-Centered Government in the Digital Age,” September 2014, 10, <https://ourpublicservice.org/wp-content/uploads/2014/09/809b0d873a2bebe10611a1c4a054e5f0-1422459562.pdf>.

¹¹⁷ Government Accountability Office, *Disaster Recovery: FEMA Needs to Assess Its Effectiveness in Implementing the National Disaster Recovery Framework*, 1.

¹¹⁸ Federal Emergency Management Agency, *National Disaster Recovery Framework*.

¹¹⁹ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 299.

¹²⁰ Government Accountability Office, *Disaster Recovery: FEMA Needs to Assess Its Effectiveness in Implementing the National Disaster Recovery Framework*.

¹²¹ Nicholas E. Davidson, “Defining the Role of Public Health in Disaster Recovery: An Evaluation of State Public Health Planning Efforts” (master’s thesis, Naval Postgraduate School, 2013), <https://www.hsl.org/?view&did=736321>.

¹²² Davidson.

NDRF,” and only two out of five had developed recovery plans as mandated.¹²³ In addition, the NDRF is not supported by funding to supplement its implementation pre-disaster—unlike the NRF, which has federal policy that compels its use for eligibility to certain tranches of funding.¹²⁴

Recovery Support Function	Federal Coordinating Agency
 Community Planning and Capacity Building	Department of Homeland Security/Federal Emergency Management Agency
 Economic	Department of Commerce/Economic Development Administration
 Health and Social Services	Department of Health and Human Services
 Housing	Department of Housing and Urban Development
 Infrastructure Systems	Department of Defense/Army Corps of Engineers
 Natural and Cultural Resources	Department of the Interior

Figure 3. NDRF RSFs by Assigned Federal Agency. Source: Government Accountability Office (2016).¹²⁵

Even if there were clear federal leadership and strong compliance to and resource support for the NDRF, it would not address significant breakdowns in coordination between governmental and nongovernmental players in LTR. Several sectors are generally needed for LTR to be successful, and thus there needs to be shared leadership between governmental and nongovernmental practitioners. Serious constraints limit LTR to what “slow bureaucratic agencies can accomplish,” which is in part “why so many nongovernmental organizations emerge to fill the gaps;” however, federal, state, and local government are necessary players as they are “uniquely capable of providing the technical

¹²³ Government Accountability Office, *Disaster Recovery: FEMA Needs to Assess Its Effectiveness in Implementing the National Disaster Recovery Framework*.

¹²⁴ Government Accountability Office.

¹²⁵ Government Accountability Office.

and financial resources that local recovery actors desperately need.”¹²⁶ Community-based planning “to coordinate self-organized recovery action” is widely recognized by EM practitioners and scholarship as critical, but co-sharing leadership in LTR presents challenges.¹²⁷ The latter would require “reconciling the need for local control with the considerable resources provided by the federal government,” which “continues to be a challenge.”¹²⁸ This tension plays out on the national and local level between governmental and nongovernmental practitioners.

Outside of poor coordination among agencies, the lack of leadership also translates into gaps in unified recovery principles across practitioners and survivors. While the “management of federal assistance programs” is critical and the focus of most media and scholarly attention on LTR, leadership must also be applied to the “systematic identification of community needs and the development of a comprehensive strategy for long-term recovery and reconstruction.”¹²⁹ “Sustainable recovery” at the community level has been seen in only a handful of exceptional cases in California, North Carolina, and Florida, which contain high-hazard areas and have regulations that “encourage or require it.”¹³⁰ As scholars of sustainable recovery highlight, the lack of leadership means that a community misses out on potentially unprecedented opportunities to build something stronger (both in resistance to disastrous events and wider economic and social cohesion) with the resources that flow into a community.¹³¹ In 2018, FEMA acknowledged these gaps in the Disaster Recovery Reform Act of 2018, which former administrator Brock Long called a “transformational” and “critical” reform in recovery that “will allow the emergency management community to continue to improve the way we deliver assistance

¹²⁶ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 294.

¹²⁷ Olshansky and Johnson, 295.

¹²⁸ Olshansky and Johnson, 295.

¹²⁹ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 239.

¹³⁰ Smith and Wenger, 252.

¹³¹ Smith and Wenger, 239.

before, during and after disasters.”¹³² It is too early to tell how these reforms may address leadership crises in LTR on the national level, state, and local level.

5. Costs of Slow Burning Crises

Crippling costs accompany the slow burning nature of LTR. Weather and climate disasters in particular have accrued immense costs: in damage costs alone, the U.S. has exceeded \$1.6 trillion over 241 disasters since 1980.¹³³ 2018 alone saw 14 billion-dollar disaster events following a three-year period with historically higher costs—with the “average number of billion-dollar disasters being more than double the long-term average.”¹³⁴ The U.S. has also seen years with especially high costs to Americans: \$312.7 billion in 2017, \$220.8 billion in 2005, and \$128.6 billion in 2012.¹³⁵ The costs of events are expected to rise as exposures and vulnerabilities to disaster continue to increase owing to high-density development in high-risk zones and climate change feeds the frequency and scope of disasters.¹³⁶

These calculations only cover damages, and thus only scratch the surface of total LTR costs. On a federal level, LTR is primarily funded through FEMA, the Department of Housing and Urban Development (HUD), and the Small Business Administration (SBA) to fill (often major) gaps in insurance coverage.¹³⁷ FEMA’s Individual Assistance, Public Assistance, and Hazard Mitigation Grant programs provide assistance to households and community organizations predominantly in early recovery, with some assistance that extends through LTR.¹³⁸ The SBA also provides support, predominantly for short-term

¹³² Federal Emergency Management Agency, “Disaster Recovery Reform Act of 2018 Transforms Field of Emergency Management.”

¹³³ Adam B. Smith, “2018’s Billion Dollar Disasters in Context” (National Oceanic and Atmospheric Administration, February 5, 2019), 1, <https://www.climate.gov/news-features/blogs/beyond-data/2018s-billion-dollar-disasters-context>.

¹³⁴ Smith, 1.

¹³⁵ Smith, 2–3.

¹³⁶ Smith, “2018’s Billion Dollar Disasters in Context.”

¹³⁷ This becomes more complicated in the case of the National Flood Insurance Program (NFIP).

¹³⁸ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters”; Federal Emergency Management Agency, *National Disaster Recovery Framework*.

recovery, but increasingly for LTR through SBA loans.¹³⁹ The primary federal support for LTR, however, tends to come through HUD’s Community Development Block Grant—Disaster Recovery (CDBG-DR).¹⁴⁰ Resilient LTR funds tend to be allocated from these grants because, in general, FEMA’s public and individual assistance provide “restoration of past conditions, while HUD’s CDBG-DR funds provide improvements over the past.”¹⁴¹ Through CDBG-DR, Congress has appropriated over \$86 billion from 1993 to 2018 for rebuilding efforts after coastal storms, terrorist attacks, floods, bombings, earthquakes, fires, and other incidents.¹⁴² Given the long-term nature of LTR, CDBG-DR tends to serve a multiplicity of recovery efforts concurrently—with 106 CDBG-DR grants being managed by HUD at more than \$54 billion at the start of 2019.¹⁴³ CDBG-DR’s docket of 106 LTR efforts is reflective of a pattern: each disaster incurs not only major upfront damage costs, but also long-term accrued expenses managed concurrently with other ongoing recovery efforts.

Although these federal costs are significant, they notably exclude the funds contributed to LTR directly by non-subsidized payment from recovering households, companies providing coverage like homeowner’s and flood insurance, state and local government aid, philanthropic fundraising and granting, services provided by nongovernmental EM entities like VOAD organizations, and community-based providers (e.g. local nonprofits, congregations, and businesses). While this research could not access enough data to properly estimate those collective, non-federal costs, the literature would

¹³⁹ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters”; Federal Emergency Management Agency, *National Disaster Recovery Framework*.

¹⁴⁰ Government Accountability Office, *Disaster Recovery: Better Monitoring of Block Grant Funds Is Needed*.

¹⁴¹ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 298.

¹⁴² Government Accountability Office, *Disaster Recovery: Better Monitoring of Block Grant Funds Is Needed*, 7.

¹⁴³ Government Accountability Office, 7.

suggest that they are immense and, at times, rival federal spending.¹⁴⁴ Regardless of the amount, the lack of alignment between federal resources and these other sources of funding has been widely criticized.

The Government Accountability Office (GAO) recently recommended that “Congress should consider permanently authorizing a disaster assistance program that meets unmet needs in a timely manner” to address a mismanagement of the sequence of delivery of funds from a wide array of sources.¹⁴⁵ Previous GAO reports echoed this complaint, noting that federal resources were often not coordinated with local resources, leading to waste in spending as “the federal agencies often offered assistance before disaster-affected communities had the capacity to effectively begin the process.”¹⁴⁶ For example, CDBG-DR is often criticized for its delivery of critical services and long-term planning after the window of opportunity in which communities have already begun to decide their collective fate—with CDBG-DR action plans being operationalized “not soon enough to coincide with the initial phases of local recovery planning.”¹⁴⁷ The other challenge in aligning resources for LTR is the inconsistent delivery of funds between disasters. As noted by the APA, the U.S. appears to have regressed in its recovery funding for domestic efforts: “In 1950, Congress decided to get out of the business of responding to each disaster on a case-by-case basis.[...] In the past two decades, however, Congress, through CDBG, has gotten back into the case-by-case disaster funding business.”¹⁴⁸

¹⁴⁴ Egan and Tischler, “The National Voluntary Organizations Active in Disaster Relief and Disaster Assistance Missions”; New York Disaster Interfaith Services, “NYC Sandy Unmet Needs Roundtable Assistance & Statistics Report Inception 03.01.13 to 6.30.17” (New York Disaster Interfaith Services; New York City Voluntary Organizations Active in Disaster, June 30, 2017); Drabek, *The Human Side of Disaster*; Rubin, “Long-Term Recovery from Disasters”; Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters”; Smith and Wenger, “Sustainable Disaster Recovery,” 2007; Luft, “Beyond Disaster Exceptionalism.”

¹⁴⁵ Government Accountability Office, *Disaster Recovery: Better Monitoring of Block Grant Funds Is Needed*, 54.

¹⁴⁶ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 297; Government Accountability Office, *Disaster Recovery: FEMA’s Long-Term Assistance Was Helpful to State and Local Governments but Had Some Limitations*, GAO-10-404 (Washington, DC: Government Printing Office, 2010), <https://www.gao.gov/products/GAO-10-404>; Government Accountability Office, *Disaster Recovery: Better Monitoring of Block Grant Funds Is Needed*.

¹⁴⁷ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 301.

¹⁴⁸ Olshansky and Johnson, 296.

Several scholars have noted that this funding approach is ineffective and deviates from practices coming out of countries like Australia that have built more rigorous structures for LTR funding.¹⁴⁹ For example, Australia’s “funding arrangements” prompt communities to consider how they want to designate funds during recovery before the disaster, based on a framework of options.¹⁵⁰ The current U.S. model makes it difficult for communities to plan for LTR prior to disasters, since local governments and their nongovernmental partners cannot plan around the scope, amount, or timing of significant federal resources. In addition, LTR planning is rarely allocated funding. However, sources like FEMA’s Hazard Mitigation Grant Program could be used pre-disaster to facilitate LTR planning, including building structures for “communication and coordination among participants, which could improve the intelligence of the recovery process.”¹⁵¹

The greater costs are not financial, but human: longer periods of displacement; financial, legal, and emotional hardships; communities broken apart; and loss of lives, among other consequences. The news media and researchers have begun to record more accurately the toll on life and livelihood that accompanies LTR, beyond the traditional coverage of immediate loss. While post-disaster mortality reporting has historically recorded deaths attributed to initial impacts, there can be a tragic accrual of LTR-related deaths in the days, months, and years following the incident.¹⁵² The deaths of LTR can have different causes than initial impact, but are traditionally not included in the official count.¹⁵³ Puerto Rico’s fatalities in the wake of Hurricane Maria highlighted these debates around the official death toll—initially recorded as 64, but later identified as between

¹⁴⁹ Australian Government Department of Home Affairs, “Disaster Recovery Funding Arrangements 2018,” June 5, 2018, <https://www.disasterassist.gov.au/Pages/related-links/disaster-recovery-funding-arrangements-2018.aspx>; Platt, “Planning Recovery and Reconstruction After the 2010 Maule Earthquake and Tsunami in Chile.”

¹⁵⁰ Australian Government Department of Home Affairs, “Disaster Recovery Funding Arrangements 2018.”

¹⁵¹ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 301.

¹⁵² The George Washington University Milken Institute School of Public Health and University of Puerto Rico Graduate School of Public Health, “Ascertainment of the Estimated Excess Mortality from Hurricane María in Puerto Rico” (Washington, D.C.: The George Washington University, August 2018).

¹⁵³ The George Washington University Milken Institute School of Public Health and University of Puerto Rico Graduate School of Public Health.

2,658–3,290.¹⁵⁴ The latter range aimed to assess fatalities from initial impact and into recovery by assessing all deaths recorded from September 2017 to February 2018.¹⁵⁵ They found that “significantly higher mortality” was recorded in impacted municipalities during LTR than in the two years prior to the incident—with a 45% higher risk of death in LTR “for populations living in low socioeconomic development municipalities, and older males (65+).”¹⁵⁶ These expansions of mortality reporting incorporate the human costs of LTR. The reforms to follow must aim at eliminating fatalities and mortality rates during LTR.

C. LONG-TERM RECOVERY’S TRENDS AS WICKED PROBLEMS

The identification of the above troubling trends in LTR as wicked problems begins with LTR’s traditional position in the field of EM. Scholars and practitioners have theorized several contributors to fissures in LTR as a part of EM. Some claim historical problems—such as a post-9/11 landscape that directed EM towards prevention and response and supported command-and-control structures designed to prepare for, and respond to, an incident without necessarily worrying about long-term effects.¹⁵⁷ Others offer cultural barriers—such as EM’s roots in first-responder agencies favoring hero-rescuer archetypes that render the slow, unglamorous slog of LTR unappealing.¹⁵⁸

However, the most relevant body of scholarship for this study points to systemic issues—specifically, preferences for top-down, predominantly hierarchical systems to creatively address complex, long-term problems that mesh unique and specific social issues and disaster impacts for each impacted community.¹⁵⁹ Several scholars—notably Rubin,

¹⁵⁴ The George Washington University Milken Institute School of Public Health and University of Puerto Rico Graduate School of Public Health.

¹⁵⁵ The George Washington University Milken Institute School of Public Health and University of Puerto Rico Graduate School of Public Health, 3.

¹⁵⁶ The George Washington University Milken Institute School of Public Health and University of Puerto Rico Graduate School of Public Health, 3.

¹⁵⁷ Rubin, “Long Term Recovery from Disasters.”

¹⁵⁸ Lauren E. Barsky and Jeremy Horan, “Volunteers and Nonprofits in Disaster,” in *Critical Issues in Disaster Science and Management: A Dialogue Between Researchers and Practitioners*, ed. Joseph E. Trainor and Tony Subbio (Washington, DC: Federal Emergency Management Agency, 2014), <https://training.fema.gov/hiedu/docs/critical-issues-in-disaster-science-and-management.pdf>.

¹⁵⁹ As will be later explained, EM is not necessarily an innately “hierarchical” field and appears to mesh network and command-and-control systems; Nowell and Steelman, “Beyond ICS.”

Smith, Wenger, Quarantelli, and Bach—have demonstrated how LTR problems evade traditional post-disaster practices “where established approaches to emergency management relied excessively on top-down government programs and leadership styles” which can contribute to “highly unsatisfactory” outcomes post-disaster.¹⁶⁰ Scholar Horst Rittel perceived similar limitations in the “linear systems approach” of urban planning in the 1970s, and coined “wicked problem” to describe problems that evade these top-down systems.¹⁶¹ As noted, a wicked problem has multiple (or no) solutions, lacks a definitive right-or-wrong dichotomy, is hard to understand before finding solutions, and has an unclear stopping point, among other perplexing qualities.¹⁶²

The troubling trends that have been identified above through an analysis of scholarship on LTR in the context of EM fit this definition of wicked problems. Five main categories of problems were identified for LTR based on the literature review of recovery scholarship, specifically for literature on community LTR. These five problem areas are classified as wicked problems for this study. This unlocks frameworks for sensemaking and tackling of those problems—as provided by the “complexity theory” scholarship to be explored in Chapter 3.

¹⁶⁰ Bach, *Strategies for Supporting Community Resilience*, 41:16; Rubin, Saperstein, and Barbee, “Community Recovery from a Major Natural Disaster.”

¹⁶¹ Rittel and Webber, “Dilemmas in a General Theory of Planning.”

¹⁶² Rittel and Webber, 161–64.

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III. MAKING SENSE OF LONG-TERM RECOVERY'S WICKED PROBLEMS

This chapter focuses on frameworks that attempt to tame wicked problems like those faced in LTR. It expands on the frameworks of complexity theory (specifically, the Cynefin framework) and their multi-stakeholder coalition approach to wicked problems. The chapter also introduces the primary LTR stakeholders—governmental EM, nongovernmental EM, and emergent groups—and their respective community-led LTR coalition work. Finally, it explores the principles of centralized versus decentralized structures, social capital, grassroots organizing, and EM's whole community approach.

A. APPLICATION OF THE CYNEFIN FRAMEWORK AND COMPLEXITY THEORY TO LONG-TERM RECOVERY

To approach wicked problems, Rittel and his colleagues created the issue-based information system, a “structure for rational dialogue among a set of diverse stakeholders” that places “human relationships and social interactions at the center.”¹⁶³ Other scholars that have delved into this approach include Jonathan Rosenhead, who detailed how to design interactions between stakeholders to “tame” the wicked problem presented.¹⁶⁴ Similar approaches to wicked problems through the merger of diverse stakeholder perspectives appear in complexity theory, which studies “how patterns emerge through the interaction of many agents.”¹⁶⁵ Notable among these is the Cynefin framework by Cynthia Kurtz and David Snowden, a “sense-making” tool meant to assist with the “decision-making capabilities of those who use it.”¹⁶⁶ The Cynefin framework outlines five domains in which decision-makers operate: “disordered, simple, complicated, complex, and chaotic.”¹⁶⁷ The simple and complicated domains represent ordered spaces where decision

¹⁶³ Conklin, “Wicked Problems and Social Complexity,” 7.

¹⁶⁴ Jonathan Rosenhead, “What’s the Problem? An Introduction to Problem Structuring Methods,” *Interfaces* 26, no. 6 (December 1996): 117–31, <https://doi.org/10.1287/inte.26.6.117>.

¹⁶⁵ Kurtz and Snowden, “The New Dynamics of Strategy,” 469.

¹⁶⁶ Kurtz and Snowden, 468.

¹⁶⁷ Kurtz and Snowden, “The New Dynamics of Strategy.”

makers can leverage “methods, tools, and techniques” that represent best/good practices; the complex and chaotic domains represent unordered spaces where decision makers cannot rely on codified structures.¹⁶⁸ Wicked problems fall under the complex domain, where one can expect “emergent patterns” but not predict them, and are characterized by cause-and-effect relationships that “defy categorization or analytic techniques.”¹⁶⁹

The decision model for complex domains requires the leader to first probe to identify emerging patterns—which “requires us to gain multiple perspectives on the nature of the system.”¹⁷⁰ Thus, Rittel’s systems that coalesce stakeholders to tackle wicked problems are also encouraged by Snowden, who sees the benefit in “increasing the number of perspectives available to the decision maker” when approaching wickedness.¹⁷¹ In his use of the Cynefin framework, Christopher Bellavita argues that the task of the leader in homeland security fields like EM is “to sift through the elements of strategic disorder” and “determine whether an issue can be ordered—and thus subject to a rich set of knowledge and methodologies—or whether the issue’s organic state is unorder.”¹⁷² If the state of LTR is unordered, but still within the domain of complexity, then the sense-making model to explore would ideally be one that gathers diverse stakeholder perspectives, according to scholars Rittel, Rosenhead, Kurtz, and Snowden.

One trend that has arisen in LTR has been community-led coalition building—which aims to bring together various stakeholders serving in LTR through a flexible model designed to meet the unique needs of each disaster-impacted community. Scholarship on recovery planning has also recommended this approach (whether or not they were cognizant of its relation to complexity theory). For example, Smith and Wenger argue that “pre- and post-disaster recovery planning relies on the meaningful involvement of multiple stakeholder groups and the use of participatory tools, including dispute resolution

¹⁶⁸ Kurtz and Snowden, 469.

¹⁶⁹ Kurtz and Snowden, 469.

¹⁷⁰ Kurtz and Snowden, 469.

¹⁷¹ Kurtz and Snowden, 469.

¹⁷² Christopher Bellavita, “Changing Homeland Security: Shape Patterns, Not Programs,” *Homeland Security Affairs* 2, no. 5 (October 2006), <https://www.hsaj.org/articles/680>.

techniques (e.g., policy dialogue, negotiation, and group facilitation).¹⁷³ Several other related scholarly disciplines mirror this approach. Scholarship focusing on “sustainable hazard mitigation” also supports this model, with recommendations to “build local networks, strive for increased capability and consensus, establish a holistic government framework, and provide comprehensive education and training” all applying to LTR.¹⁷⁴ Drabek, Olshansky, Johnson, Rubin, and Quarantelli reference recovery coalition building pre- and post-disaster, with Drabek explicitly highlighting it as a primary “mitigation strategy.”¹⁷⁵ The creation of local networks and consensus building via coalitions is also reflected in private industry trends, such as the concept of a “megacommunity.” Megacommunity approaches basically create a community of practitioners, bringing together organizations from various sectors for the entire cycle of planning efforts for any issue.¹⁷⁶ The primary stakeholders for these approaches are businesses, nonprofits, and governments—both large and small organizations—as leveraged in models implemented in domestic and international LTR.¹⁷⁷

Although scholarship and practices from these various disciplines reference the necessity of these approaches, not enough scholarly attention has been directed to this approach in LTR. Smith and Wenger claim that different models for community recovery coalitions should be “further studied and the results applied in the field in order to assess their effectiveness.”¹⁷⁸ They define them as “collaborative planning networks” that are made up of “professionals (e.g., planners, engineers, etc.), nonprofits, community and environmental groups, and businesses that have successfully implemented sustainable recovery programs and are willing to share their experiences with others.”¹⁷⁹ As summarized in Figure 4, the literature suggests that for LTR’s wicked problems in the

¹⁷³ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 248.

¹⁷⁴ Smith and Wenger, 237.

¹⁷⁵ Drabek, *The Human Side of Disaster*, 227.

¹⁷⁶ Art Kleiner, ed., *The Megacommunity Way* (Booz Allen Hamilton, Inc., 2007).

¹⁷⁷ Kleiner.

¹⁷⁸ Smith and Wenger, “Sustainable Disaster Recovery,” 2007, 257.

¹⁷⁹ Smith and Wenger, 257.

complex domain, stakeholders must be identified and sustainably gathered for continuous planning as new patterns emerge, as reflected in the community-led LTR coalition model.

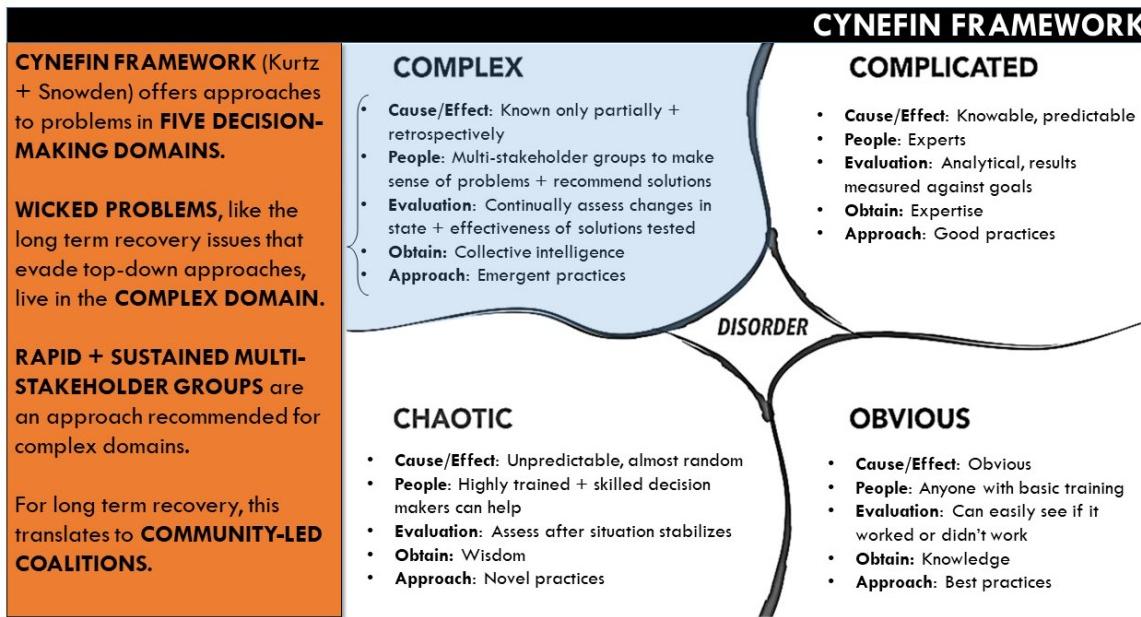


Figure 4. Cynefin Framework, as Applied to LTR and Community-Led LTR Coalitions. Adapted from Kurtz and Snowden (2003).¹⁸⁰

B. THE SANDBOX OF LONG-TERM RECOVERY STAKEHOLDERS

In alignment with the complexity theory of Rittel, Rosenhead, Kurtz, and Snowden, a theme in community LTR scholarship establishes that there are various, disparate types of stakeholders who play a role in LTR and that there should be coordination and communication among those stakeholders at the community level. Those stakeholders in LTR can be organized into three sectors, based on the systems used: established governmental EM, established nongovernmental EM, and emergent groups. The growth, distinctions, and commonalities between these systems will also be considered in this mapping of LTR stakeholder groups for community-led LTR coalitions.

¹⁸⁰ Kurtz and Snowden, “The New Dynamics of Strategy”; Bronagh Gallagher and Chris Corrigan, “Frameworks Are Helpful,” *Working in Complexity for Non-Profits* (blog), July 31, 2017, <https://workingincomplexityscotland.weebly.com/blog/frameworks-are-helpful>.

1. Governmental EM

In 1970, Californian fire agencies came together in response to complex fires to create a formal management system for the command and control of their services.¹⁸¹ This structure became the Incident Command System (ICS), which is widely used in federal, state, and local government for EM and is considered “one of the longest-running experiments in applied systems thinking.”¹⁸² The use of common workforce structures, language, and templates is considered fundamental in ICS, which has become the foundational model for EM over its 50 years of application in the US.¹⁸³ ICS is usually split into five functional areas: command, operations, planning, logistics, and finance/administration. Incident management is achieved through common organizational structures and languages that span vertically across federal, state, and local governments and laterally across jurisdictions.¹⁸⁴ Although ICS features prominently in FEMA’s National Incident Management System, other systems support its implementation, such as Emergency Support Functions that bundle resources into core capabilities such as “health and medical” and “external affairs.”¹⁸⁵ Governmental EM are thus those agencies that utilize one of these structures to serve in the EM cycle, which can include EM-focused agencies, along with agencies that have EM functions, such as law enforcement, fire services, public health, and other agencies at the federal, state, and local level.

ICS usage expanded in the wake of the 9/11 attacks, after the 9/11 Commission recommended that first-responder agencies adopt the system, and Homeland Security

¹⁸¹ Dana Cole, *The Incident Command System: A 25-Year Evaluation by California Practitioners* (Emmitsburg, MD: National Fire Academy Executive Fire Officer Program, 2000), 207.

¹⁸² Cole, 201.

¹⁸³ Cole, 201.

¹⁸⁴ Federal Emergency Management Agency, “Lesson 4: Incident Command System (ICS),” accessed October 15, 2018, <https://emilms.fema.gov/IS700b/groups/330.html>.

¹⁸⁵ Donna Dietz, *Emergency Support Function Annexes: Introduction* (Washington, DC: Federal Emergency Management Agency, 2008), https://www.fema.gov/media-library-data/20130726-1825-25045-0604/emergency_support_function_annexes_introduction_2008_.pdf.

Presidential Directive Five subsequently restricted grant money to require its usage.¹⁸⁶ Local jurisdictions have subsequently adopted localized iterations of the National Incident Management System—such as NYC’s Citywide Incident Management System that coordinates various city agencies through a central EM agency called New York City Emergency Management (NYCEM).¹⁸⁷ Although generally focused on response to emergencies, FEMA has created frameworks for applying these systems to all its mission areas (e.g., the National Response Framework and aforementioned NDRF). Scholars tend to agree that governmental EM should play a critical role in recovery, especially in the capacity to “inform, support, facilitate, and influence the many recovery actors” through “leadership and coordinating functions that help local recovery actors to mutually support one another.”¹⁸⁸ This sector thus offers several critical players in the LTR landscape.

2. Nongovernmental EM

In 1970, while seven fire agencies were gathering in California to develop the foundations of ICS, seven nonprofits were devising a system for coordination in the wake of Hurricane Camille on the Gulf Coast.¹⁸⁹ The latter’s work led to the formation of National VOAD, which has formed state and local chapters across 55 states and territories, representing “hundreds of member organizations throughout the country.”¹⁹⁰ VOAD brings together mostly established “faith-based, community-based and other non-governmental” organizations and businesses on a national level to (1) “mitigate and alleviate the impact of disasters,” (2) “provide a forum promoting cooperation, communication, coordination and collaboration,” and (3) “foster more effective delivery

¹⁸⁶ National Commission on Terrorist Attacks upon the United States, “The 9/11 Commission Report Final Report of the National Commission on Terrorist Attacks Upon the United States” (National Commission on Terrorist Attacks upon the United States, 2004), 397; “Homeland Security Presidential Directive/ HSPD-5 Directive on Management of Domestic Incidents (February 28, 2003),” *Weekly Compilation of Presidential Documents* 39, no. 10 (March 10, 2003): 280–85.

¹⁸⁷ New York City Emergency Management, “Citywide Incident Management System,” accessed October 15, 2018, <https://www1.nyc.gov/site/em/about/citywide-incident-management-system.page>.

¹⁸⁸ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 294.

¹⁸⁹ National Voluntary Organizations Active in Disaster, “About Us,” National VOAD, accessed October 6, 2018, <https://www.nvoad.org/about-us/our-history>.

¹⁹⁰ National Voluntary Organizations Active in Disaster, “About Us.”

of services to communities affected by disaster.”¹⁹¹ In addition to regional, state, and city VOAD, community-based coalitions also tend to use VOAD language and models known as Community Organizations Active in Disaster (COAD).¹⁹² The spread of VOAD models across the country, and at various levels, is sometimes known as the VOAD “movement.”¹⁹³ Several major disaster relief organizations—including the American Red Cross, the Salvation Army, and United Way—are VOAD members.

VOAD strives to be recognized as the “non-governmental leader of the disaster preparedness, response, and recovery sector,” thus overlapping with three of FEMA’s five mission areas.¹⁹⁴ The movement’s “core principles” are “cooperation, communication, coordination, and collaboration,” which are predominantly manifested through committees. Like emergency support functions in government EM, VOAD committees organize around service areas—such as “donations management” or “reconstruction”—and use points of consensus that are meant to provide common operating values and language for each service area.¹⁹⁵ Regional/local VOADs sometimes also mobilize field centers for coordination—notably volunteer reception centers and points of distribution.¹⁹⁶ While VOAD covers most major disaster nonprofits serving in the US, there are a few nongovernmental organizations that focus on EM services that are not members of VOAD, which is why this sector is labeled “nongovernmental EM.”¹⁹⁷ However, for the purposes of this study, the organizations participating in community-led LTR coalitions from this sector are predominantly VOAD members. The defining feature of organizations in this sector, VOAD or not, is established EM programs and networks as practitioners with experience in providing specific EM, especially recovery, services.

¹⁹¹ National Voluntary Organizations Active in Disaster.

¹⁹² National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*.

¹⁹³ National Voluntary Organizations Active in Disaster, “About Us.”

¹⁹⁴ National Voluntary Organizations Active in Disaster, *National VOAD Strategic Plan 2014–2016*, 2016, http://www.nvoad.org/wp-content/uploads/2014/05/nvoad_strategicplan_double-sided_PRESS-1.pdf.

¹⁹⁵ National Voluntary Organizations Active in Disaster, “Committees.”

¹⁹⁶ National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*, 12.

¹⁹⁷ This author is knowledgeable of these exceptions from her service to Sandy recovery. On rare occasions, the author interacted with nonprofits focused on EM that were not officially VOAD members.

3. Emergent Groups

In 1970, volunteers in San Diego designed their own impromptu systems to combat complex fires, while agencies were gathering to form the foundations of ICS and VOAD. These volunteers worked day and night shifts to develop and coordinate intake processes for evacuee requests for housing/donations and create support services for firefighters.¹⁹⁸ Local civil defense agencies were overwhelmed and had requested volunteer support. Quarantelli and Stallings, leaders in disaster sociology who authored early assessments of emergent groups, captured the development of these systems. They claimed that this example represents a phenomenon that can be expected to emerge after disaster.¹⁹⁹

Quarantelli and Stallings argued that these “emergent citizen groups” are part of “a long tradition of grass-roots political organization in the United States” that “emerge around perceived needs or problems associated with both natural and technological disaster situations.”²⁰⁰ They used “emergent” to highlight their “newness, absence of formalization, and lack of tradition.”²⁰¹ They outlined types of groups that serve throughout the disaster cycle (some formed prior to the incident).²⁰² Quarantelli and Stallings predicted that these groups would become more prominent and recommended that emergency managers plan accordingly.²⁰³ Their work also contributed to efforts to counter a common narrative in mid-20th century civil defense that assumed public pandemonium, instead of highlighting the naturally occurring systems for coordination and cooperation that often arise after emergencies.²⁰⁴ Their work is part of a large body of research that has grown significantly around emergent community organizing and social resilience in the wake of disaster.

¹⁹⁸ Robert A. Stallings and Enrico L. Quarantelli, “Emergent Citizen Groups and Emergency Management,” *Public Administration Review* 45 (1985): 93, <https://doi.org/10.2307/3135003>.

¹⁹⁹ Stallings and Quarantelli, 98.

²⁰⁰ Stallings and Quarantelli, 94.

²⁰¹ Stallings and Quarantelli, 94.

²⁰² Stallings and Quarantelli, 94.

²⁰³ Stallings and Quarantelli, 94.

²⁰⁴ Jon Mooallem, “Henry ‘Enrico’ Quarantelli Proved That Disasters Bring Out the Best in Us,” *New York Times Magazine*, December 28, 2017, <https://www.nytimes.com/interactive/2017/12/28/magazine/the-lives-they-lived-enrico-l-quarantelli.html>, <https://www.nytimes.com/interactive/2017/12/28/magazine/the-lives-they-lived-enrico-l-quarantelli.html>.

Works by Daniel Aldrich and Russell Dynes have delved deeper into emergence during recovery and its relation to a community's social capital.²⁰⁵ Diverse recovery case studies on emergence post-Katrina have appeared, notably by Jeffrey Stout, Rachel Luft, and Rebecca Solnit.²⁰⁶ Their focus in the study of emergence extends beyond citizen groups and into community-based organizations, congregations, and other service providers that form emergent disaster coordination services. These scholars offer a range of case studies on how individuals, groups, and organizations devise emergent support systems that fill gaps with often complex coordinating assemblies.

C. THE SANDBOX OF COMMUNITY-LED LONG-TERM RECOVERY COALITION MODELS, BY SECTOR

A lack of one community across the above three sectors of LTR practitioners can weaken the ability to address LTR's wicked problems and, in some cases, may be a contributor. Complexity theory suggests that wicked problems call for a coalition of stakeholders across sectors, and these three sectors comprise the primary vehicles for leadership, resources, and planning for LTR. But what does application of the concept look like? What types of models have been conceived and/or implemented? This section addresses the application of the theory of multi-sector coalition building as an approach to LTR's wicked problems—organizing model by respective sector. Notably, coalition models have been offered by practitioners in governmental EM, nongovernmental EM, and emergent groups that propose alignment between the sectors in community LTR. Each model recognizes the need for the coordination to occur on a community level.

²⁰⁵ Aldrich, *Building Resilience*; Russell Dynes, "Social Capital: Dealing with Community Emergencies," *Homeland Security Affairs* 2, no. 2 (July 1, 2006), <https://www.hsaj.org/articles/168>.

²⁰⁶ Stout, *Blessed Are the Organized*; Luft, "Beyond Disaster Exceptionalism"; Rebecca Solnit, *A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster* (London, England: Penguin Books, 2010).

1. Governmental EM: Whole Community Approach and Long-Term Community Recovery

In 1997, FEMA initiated a short-lived federal initiative called Project IMPACT that aimed to create “disaster-resistant communities” by bringing together different levels of government, private, and nonprofit sectors.²⁰⁷ This culture shift contributed to several FEMA initiatives related to recovery—notably, a 1998 self-help guide created with the American Planning Association to compile community recovery planning knowledge to create a community LTR coalition.²⁰⁸ By 2004, FEMA had embedded community LTR into its national “Emergency Support Function 14: Long-Term Community Recovery.”²⁰⁹ The support function materials showcase community-based coordination models between governmental and nongovernmental EM in LTR.²¹⁰ These efforts show the arenas in which the federal government has recognized some iteration of community-led LTR coalitions.

In 2011, FEMA released the whole community approach doctrine, which describes “a means by which residents, emergency management practitioners, organizational and community leaders, and government officials” collectively assess communities and identify how to “organize and strengthen their assets, capacities, and interests.”²¹¹ It also released the NDRF, which includes the RSF “Community Planning and Capacity Building” to replace Emergency Support Function 14.²¹² In 2012, FEMA released a toolbox that built

²⁰⁷ Federal Emergency Management Agency, *Project IMPACT: Building a Disaster Resistant Community* (Washington, DC: Federal Emergency Management Agency, 1997), <https://training.fema.gov/hiedu/docs/hazriskmanage/hazards%20risk%20mgmt%20-%20session%204%20-%20project%20impact%20guidebook.pdf>.

²⁰⁸ Federal Emergency Management Agency, *Lessons in Community Recovery: Seven Years of Emergency Support Function #14 Long-Term Community Recovery from 2004 to 2011* (Washington, DC: Federal Emergency Management Agency, 2011), 13, https://www.fema.gov/pdf/rebuild/ltrc/2011_report.pdf.

²⁰⁹ Federal Emergency Management Agency, *Lessons in Community Recovery: Seven Years of Emergency Support Function #14 Long-Term Community Recovery from 2004 to 2011*.

²¹⁰ Federal Emergency Management Agency, *Long-Term Community Recovery Planning Process: A Self-Help Guide* (Washington, DC: Federal Emergency Management Agency, 2005), <https://www.fema.gov/media-library-data/20130726-1538-20490-8825/selfhelp.pdf>.

²¹¹ Federal Emergency Management Agency, *A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action* (Washington, DC: Federal Emergency Management Agency, 2011), 3, <https://www.fema.gov/media-library/assets/documents/23781?id=4941>.

²¹² Federal Emergency Management Agency, *National Disaster Recovery Framework*.

on a decade of community LTR case studies.²¹³ The toolbox offers a communications tool that outlines how to identify stakeholders across governmental and nongovernmental sectors for a recovery committee and maintain buy-in and trust while assessing the incident and setting a common vision, goal, and plan for LTR in the community.²¹⁴ Much of FEMA's literature on community LTR models guide a local government agency (e.g. EM, planning, public health) or governing body (e.g., mayoral office, city council, or school board) on how to form and lead the coalition—although some FEMA literature recognizes that a nongovernmental entity could also lead. The approach focuses on “strong recovery management organizations” at the local level to “establish an umbrella recovery management organization” that connects to local governmental EM “for coordination of pre- and post- event short and long-term recovery outcomes.”²¹⁵ In this model, community-led LTR coalitions facilitate coordination between governmental EM, nongovernmental EM, and emergent groups, in addition to local political bodies/leaders.

2. Nongovernmental EM: National VOAD Movement and Community-Based Long-Term Recovery Groups

The community-led LTR coalition model with the widest use, recognition, and structure is the LTRG—also known as a long-term recovery committee/organization or unmet needs committee.²¹⁶ The VOAD movement, which has published a LTR guide that outlines the model, has generally promoted the adoption of LTRGs.²¹⁷ Other major disaster nonprofits and foundations have also offered guides for forming and maintaining an LTRG or have begun to recognize and support the model.²¹⁸ National, state, and local VOAD

²¹³ Federal Emergency Management Agency, “Long-Term Community Recovery ToolBox,” March 2012, https://www.fema.gov/media-library-data/20130726-1841-25045-1186/ltrc_toolbox_508compliant_062112.pdf.

²¹⁴ Federal Emergency Management Agency, 9–19.

²¹⁵ Schwab et al., “Planning for Post-Disaster Recovery,” 59.

²¹⁶ National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*.

²¹⁷ National Voluntary Organizations Active in Disaster.

²¹⁸ Center for Disaster Philanthropy, “Long Term Recovery Groups,” DisasterPhilanthropy, May 2019, <https://disasterphilanthropy.org/issue-insight/long-term-recovery-groups>; Church World Service Emergency Response, *Managing & Operating a Disaster Long-Term Recovery Organization: A Capacity Building Guidebook* (New York, NY: Church World Service, 2009).

member organizations or FEMA VALs usually introduce the model to disaster-impacted communities.²¹⁹ FEMA’s NDRF and the Recovery Reform Act of 2018 feature LTRGs.²²⁰ They are thus acknowledged by governmental and nongovernmental EM.

VOAD describes a LTRG as “a cooperative body that is made up of representatives from faith-based, non-profit, government, business and other organizations working within a community to assist individuals and families as they recover from disaster.”²²¹ It emphasizes that the model has arisen across the country, albeit widely “varied in their structure” based on each community’s unique “local needs, available resources, cultural diversity, leadership style, and community support.”²²² LTRGs often arise during recovery—or form from a preparedness coalition—with the aim to maximize resources and streamline services for disaster-affected families.²²³ Such LTRGs generally use a comparable service-based committee model to VOAD to organize their services—usually including reconstruction, case management, donation/volunteer management, legal services, health/mental health services, financial counseling, and emotional/spiritual care.²²⁴ LTRGs generally comprise community-based nonprofits, congregations, associations, businesses, academia, and community leaders; however, local, state, and

²¹⁹ National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*; Federal Emergency Management Agency, *National Disaster Recovery Framework*.

²²⁰ Federal Emergency Management Agency, *National Disaster Recovery Framework*; Congressional Budget Office, “S. 3041 Disaster Recovery Reform Act of 2018,” Cost Estimate (Senate Committee on Homeland Security and Governmental Affairs, September 27, 2018).

²²¹ National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*, 6.

²²² National Voluntary Organizations Active in Disaster, 6.

²²³ National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*; Center for Disaster Philanthropy, “Long Term Recovery Groups”; Katherine E. Browne and Trevor Even, “The ‘Culture of Disaster’ Student Immersion Project: First-Hand Research to Learn about Disaster Recovery after a Colorado Flood,” *International Journal of Mass Emergencies & Disasters* 36, no. 3 (November 2018): 264–86; Staten Island Interfaith and Community Long Term Recovery Organization, “Testimony of the Staten Island Interfaith and Community Long Term Recovery Organization Before the New York City Council Committee on Recovery and Resiliency.”

²²⁴ National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*.

national governmental and nongovernmental EM stakeholders may also join.²²⁵ Thus, the formula of LTRG membership integrates VOAD, emergent groups, and government.

3. Emergent Groups: Community Organizing and Recovery Platforms

Other players besides governmental and nongovernmental EM contribute to community-led LTR coalitions. Emergent groups have formed entirely new community-led LTR coalition models that have been assessed, captured, and replicated outside their communities. For example, a startup nonprofit that creates a “recovery in a box” website took lessons learned from recovery efforts following a tornado to create an online platform for other recovering communities.²²⁶ Nearly 300 communities use the model to bring together local practitioners to organize recovery hubs that streamline resources and services.²²⁷ The platform is open to governments, organizations, and residents.

A number of web-based, open-source platforms have also arisen, such as Sarapis after Sandy and CrowdSource Rescue Houston after Hurricane Harvey. These use crowdsourcing to create digital manifestations of community-led LTR coalitions.²²⁸ These platforms leverage trends towards decentralized recovery through the extraction and management of individual and community-wide data on LTR.²²⁹ They employ technologies that use “mobile terminals like smart phones” to gather data from applications, calls/texts, and social media to analyze group patterns and coordinate “services to end users.”²³⁰ During Hurricane Harvey in 2017, CrowdSource Rescue used

²²⁵ Browne and Even, “The ‘Culture of Disaster’ Student Immersion Project”; Staten Island Interfaith and Community Long Term Recovery Organization, “Testimony of the Staten Island Interfaith and Community Long Term Recovery Organization Before the New York City Council Committee on Recovery and Resiliency”; Center for Disaster Philanthropy, “Long Term Recovery Groups”; National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*.

²²⁶ Morgan O’Niell, Alvin Liang, and Chris Kuryak, “Recovers.Org,” accessed March 20, 2019, <https://recover.org>.

²²⁷ O’Niell, Liang, and Kuryak.

²²⁸ Devin Balkind, “Sarapis,” accessed April 5, 2019, <https://sarapis.org/emergencymanagement>; Crowd Source Rescue, “CrowdSourceRescue - Home,” April 1, 2019, <https://crowdsourcerescue.com>.

²²⁹ Patrick Meier, *Digital Humanitarians: How Big Data is Changing the Face of Humanitarian Response* (Boca Raton, FL: CRC Press, Taylor & Francis Group, 2015).

²³⁰ An Jian et al., “Mobile Crowd Sensing for Internet of Things: A Credible Crowdsourcing Model in Mobile-Sense Service,” in *2015 IEEE International Conference on Multimedia Big Data*, 2015, 92–99, <https://doi.org/10.1109/BigMM.2015.62>.

crowdsourcing from social media, calls, and texts to centralize and visualize calls for help onto an interactive map.²³¹ The organization partnered with volunteer groups and disability advocate organizations to form a network that claimed 37,000 rescues—with technologies and partnerships now leveraged for Houston’s LTR.²³² Leaders in international disaster relief categorize the last decade of efforts like this as a “Disaster Relief 2.0” that signals the “future of information sharing in humanitarian emergencies.”²³³

D. THE REALITIES OF INTEGRATING SECTORS INTO COMMUNITY-LED LTR COALITIONS

The models created for LTR vary by sector, but all fit the stakeholder networks for complex domains put forth by scholars like Rittel, Rosenhead, Kurtz, and Snowden and aim to approach the wicked problems outlined by LTR scholars like Rubin, Quarantelli, Johnson, Olshansky, Drabek, Smith, and Wenger. All three sectors thus offer varying models for LTR coalition building, with community-based stakeholders at the helm who choose either shared leadership or close coordination with stakeholders that have relevant expertise and resources in EM. Community-led LTR coalitions implemented by the three major LTR sectors—and ideally integrating all those sectors—offer a body of practice encompassing an all-hands-on-deck disaster ethos.

But who is equipped to facilitate coalitions that mobilize representation from each of the above sectors? What are the factors and challenges facing leaders trying to form these coalitions out of sectors with distinct, sometimes contradictory structures, cultures, language, and goals? These queries are critical in bringing the theory and models presented

²³¹ Gregor Aisch et al., “Thousands Cried for Help as Houston Flooded,” *New York Times*, August 30, 2017, sec. U.S., <https://www.nytimes.com/interactive/2017/08/30/us/houston-flood-rescue-cries-for-help.html>; Ryan Duffy, “This App Maker Says His Work Saved Thousands During Hurricane Harvey — and He’s Not Done Yet,” *The Verge*, April 17, 2018, <https://www.theverge.com/2018/4/17/17244390/hurricane-harvey-crowdsource-rescue-app>.

²³² The Partnership for Inclusive Disaster Strategies, “Getting It Wrong: An Indictment with a Blueprint for Getting It Right Disability Rights, Obligations and Responsibilities Before, During and After Disasters,” May 2018, <http://www.disasterstrategies.org/index.php/news/partnership-releases-2017-2018-after-action-report>; Aisch et al., “Thousands Cried for Help as Houston Flooded.”

²³³ Harvard Humanitarian Initiative, *Disaster Relief 2.0: The Future of Information Sharing in Humanitarian Emergencies* (Washington, DC and Berkshire, UK: United Nations Foundation & Vodafone Foundation Technology Partnership, 2011), 1.

closer to the application of the ideas in the laboratories of LTR practice. These questions are drawn from the scholarly literature and public materials that helped craft the above sketches of the major sectors of LTR practitioners, and are further explored below.

1. Supporting Integration

Community-led LTR coalitions not only align with the multi-stakeholder networks recommended for wicked problems in complex domains, they also offer a way to create a confluence between approaches viewed as either contrary or complementary in the wake of disaster. Notably, these models may enmesh the (1) processes of centralized hierarchies and decentralized networks, (2) principles of EM and grassroots organizing, and (3) approaches of vertical and lateral social capital building.

a. *Centralized Hierarchies and Decentralized Networks*

Debates regarding hierarchies versus networks exist across and within all three sectors serving LTR. Some LTR scholarship reports that recovery failures can be attributed predominantly to governmental EM because of its hierarchical approaches.²³⁴ Unsurprisingly, governmental EM is sketched as representative of the hierarchical, command-and-control, classic top-down approach of centralized government. A glance at a command structure, such as an ICS organizational chart, immediately shows that hierarchy, as seen at the top of Figure 5. However, although governmental EM may be the most hierarchical of the sectors, it is not necessarily innately hierarchical. Scholars have argued that EM was not designed to take only top-down approaches, and that it does not actually do so in practice among agencies.²³⁵ Branda Nowell and Toddi Steelman, for example, have claimed that while there are hierarchies innate in the design of ICS, EM writ large blends hierarchy and network models.²³⁶ With this perspective, the creation of common language and roles in the seemingly hierarchical model of ICS appear instead to be created mostly for consistencies in interoperability between agencies in need of

²³⁴ Rubin, “Long Term Recovery from Disasters”; Bach, *Strategies for Supporting Community Resilience*; Luft, “Beyond Disaster Exceptionalism”; Drabek, *The Human Side of Disaster*.

²³⁵ Nowell and Steelman, “Beyond ICS.”

²³⁶ Nowell and Steelman.

coordination across a network of agencies. This strategy aligns with the stated initial aims of the development of domestic ICS in the 1970s among fire agencies in California.²³⁷

The concept appears to hold true in the network models of emergency operations centers and mutual aid agreements, among other structures used by governmental EM.²³⁸ Of course, governmental EM has also attempted to decentralize approaches through the integration of nongovernmental practitioners in doctrine like the whole community approach. That doctrine may struggle to be implemented, but its principles still challenge the tradition of more hierarchical approaches to EM and reflect a wider movement to leverage more flexible approaches to disaster. That movement is not only in EM, but also in other governmental fields that may traditionally appear to favor hierarchies. Even the military has long adopted meshed network-hierarchy models, as expounded by General Stanley McChrystal in *Team of Teams*, in which this innovation was required to adjust to the decentralized fighting of Al-Qaeda.²³⁹ Leaders like McChrystal have intentionally leveraged complexity theory in infusing decentralized models with varying degrees of hierarchy to develop approaches that can flexibly and rapidly develop solutions to wicked problems in complex domains through diversified collections of stakeholders.²⁴⁰ Examples of these variations are outlined in Figure 5, which visualizes the classic hierarchical command structure, alongside a hybrid hierarchy-network command of teams and a more network-oriented team of teams.

²³⁷ Cole, *The Incident Command System: A 25-Year Evaluation by California Practitioners*.

²³⁸ Nowell and Steelman, “Beyond ICS.”

²³⁹ Stanley A. McChrystal, *Team of Teams: New Rules of Engagement for a Complex World* (New York, New York: Portfolio/Penguin, 2015).

²⁴⁰ McChrystal.

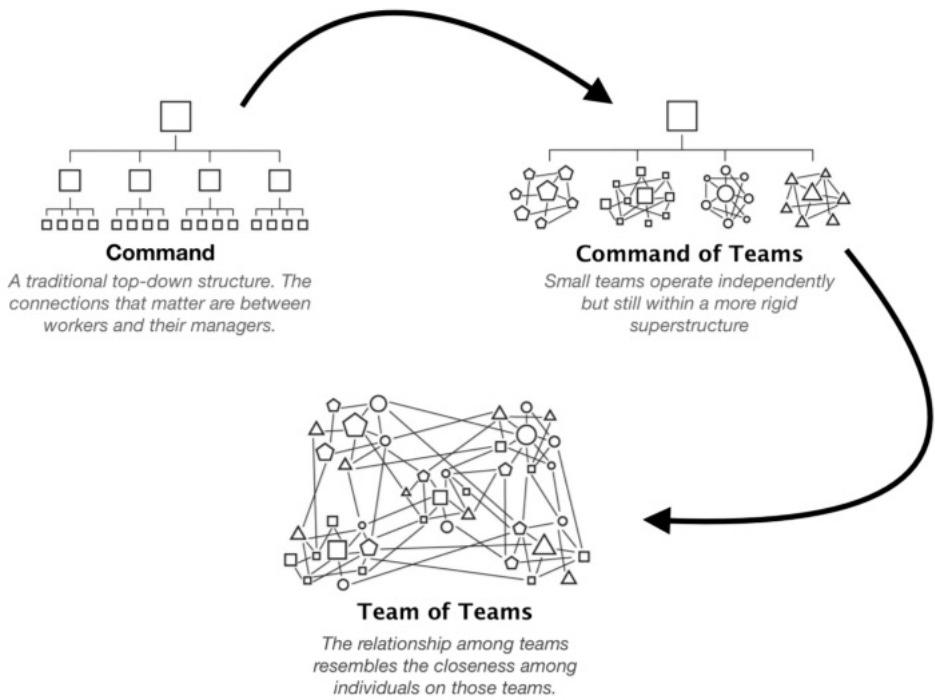


Figure 5. Centralized, Hybrid, and Decentralized Structures: Command, Command of Teams, and Team of Teams. Source: McChrystal (2015).²⁴¹

While ICS is often more hierarchical than the more consensus-oriented forums of VOAD, VOAD sometimes also manifests in more hierarchical approaches. This continuum ranges from hierarchies adapted in order to align with governmental EM (such as participating in an emergency operations center through the “human services” emergency support function and adapting ICS-like hierarchies in VOAD member organizations) to high-level standardization of branding, structure, and compliance across independent VOADs (such as the lack of formal recognition of some VOADs and COADs that may not comply with national and/or state VOAD standards).²⁴² Some VOAD leaders have emphasized VOAD as a movement with both formal and informal affiliations that extend to the community level. An example of this trend to share resources on VOAD practices

²⁴¹ McChrystal, 129; Beau Gordon, “Key Takeaways from Team of Teams by General Stanley McChrystal,” *Medium* (blog), April 17, 2017, 129, <https://medium.com/@beaugordon/key-takeaways-from-team-of-teams-by-general-stanley-mccrystal-eac0b37520b9>.

²⁴² Information provided in interviews facilitated with LTR practitioners for the thesis’ analysis who worked for VOAD member organizations.

with communities that may choose to formally take part in VOAD can be seen in LTR work through the encouragement of LTRGs. In this way, they have increasingly offered a bridge between governmental EM and emergent groups in the wake of disaster.

The most popular systems of governmental and nongovernmental EM—ICS and VOAD, respectively—may come from different worlds, but can be seen as complementary. They aim to build a more unified community of practitioners through common systems and languages. Both claim to encourage a defined, unifying mission to drive a more efficient and effective delivery of services and resources. The dual histories of governmental and nongovernmental EM reveal these commonalities and growth from similar needs: complex emergencies overwhelmed agencies in these sectors, and they recognized the need to coordinate limited resources and time. These common aims of ICS and VOAD can be applied to emergent systems as well. As outlined, scholarship offers a range of case studies on how individuals, groups, and organizations devise emergent support systems that fill gaps in EM with often complex coordinating assemblies. As Quarantelli and Stallings outline, these groups are reflective of the larger vision of the EM landscape, in which “there is increasing attention to integrated emergency management.”²⁴³

b. Principles of EM and Grassroots Organizing

Community-led LTR coalitions often merge principles of EM and classic organizing practices from grassroots mobilizing efforts. The latter has traditionally occurred around social issues—notably, the civil rights movement—but has since been applied to several post-recovery environments.²⁴⁴ The post-Katrina landscape provides a wealth of examples of EM merging with grassroots organizing, notably in the works of Luft and Stout. Stout in particular sketches faith-based organizing by a coalition that meshed coordination around issues like racial equity and poverty with coordination for recovery. He provides helpful definitions for coalition building in an LTR landscape—discerning between the complementary roles of “organizers,” “leaders,” and “core teams”:

²⁴³ Stallings and Quarantelli, “Emergent Citizen Groups and Emergency Management,” 94.

²⁴⁴ Stout, *Blessed Are the Organized*; Luft, “Beyond Disaster Exceptionalism.”

‘Organizers’ are professionals tasked with helping ordinary citizens learn the practices of organizing and accountability. ‘Leaders’ are citizen volunteers who have earned the right to represent an institution—such as a church or labor union—that has decided to join the organization. A ‘core team’ is a set of leaders recognized as having the authority to formulate proposals and develop strategies on behalf of the organization.²⁴⁵

Stout discerns a specific type of grassroots organizing that seemed to be the most effective in the post-Katrina landscape: broad-based organizing, defined as dealing broadly across intersecting issue areas, and thus also across diverse interest groups (for example, crossing health/housing issues and expanding across racial identity groups).²⁴⁶ This approach differs from community organizing in that it “sometimes succeeds in building lasting coalitions that involve multiple communities” and from social movement organizing in that it “does not restrict itself to a single issue and instead takes up different issues over time in response to concerns expressed by citizens.”²⁴⁷ Stout describes the approach of bringing together disparate groups into broad-based organizing as entailing “hundreds of individual conversations and small gatherings.”²⁴⁸ In these examples, broad-based organizing encompasses leaders and organizations across issue types.

Although Stout does not indicate that governmental/nongovernmental EM took part in these types coalitions in New Orleans, evidence suggests that this occurred in other coalitions and in LTR efforts after other disasters.²⁴⁹ This type of “self-organizing adaptation” has also been cited by scholars “as the key to recovery success” as it encompasses “creativity; new partnerships and institutions; adaptation; and leadership of all kinds.”²⁵⁰ Traditional organizing efforts may not always have room for authority figures like governmental and nongovernmental EM, but broad-based organizing does lend itself more naturally to the cross-sector community-led LTR coalitions analyzed here.

²⁴⁵ Stout, *Blessed Are the Organized*, 2.

²⁴⁶ Stout, 8.

²⁴⁷ Stout, 8.

²⁴⁸ Stout, 2.

²⁴⁹ Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force”; National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*.

²⁵⁰ Arendt and Alesch, *Long-Term Community Recovery from Natural Disasters*.

When implemented successfully, community-led LTR coalitions can embody principles in EM that value planning, multi-agency coordination, and life and safety as priorities, with concepts of grassroots organizing that value increasing the power of disinvested populations through coordination, advocacy, and consensus building. Broad-based coalition building can also match the resources and competencies of governmental/nongovernment EM with the community knowledge, trust, and reach of emergent groups. Ultimately, these can be complementary systems when stakeholders recognize that while the traditional competencies of EM should include LTR, EM can fall short in community LTR without the tactics and principles of grassroots organizing, especially Stout's broad-based organizing.

c. Approaches of Vertical and Lateral Social Capital Building

Scholarship on relationships between government and nongovernment can be classified into many types, but will be split into two primary camps for the purpose of this analysis. The first emphasizes the value of authorities with power—such as governments, large companies, media, etc.—engaging with communities that often lack the same resources or information.²⁵¹ This model aims to create linkages between institutions and community members and providers. It is very popular in domestic government, especially at the local level. The second camp emphasizes social cohesion between an individual and local leaders, organizations, businesses, congregations, etc.²⁵² This effort entails the creation of built environments encouraging cohesion (intentional housing and public space), the development of block and property associations, encouragement of local events and block parties, etc. This latter tends not to emphasize the importance of connection to powers or authorities, but rather emphasizes community self-reliance.

²⁵¹ Madeleine McNamara, "Starting to Untangle the Web of Cooperation, Coordination, and Collaboration: A Framework for Public Managers," *International Journal of Public Administration* 35, no. 6 (May 2012): 389–401, <https://doi.org/10.1080/01900692.2012.655527>; Sherry R. Arnstein, "A Ladder of Citizen Participation," *Journal of the American Institute of Planners* 35, no. 4 (July 1969): 216–24, <https://doi.org/10.1080/01944366908977225>.

²⁵² Michelle Spencer, "Lessons from Japan: Resilience after Tokyo and Fukushima," *Journal of Strategic Security* 6, no. 2 (June 2013): 70–79, <https://doi.org/10.5038/1944-0472.6.2.6>.

Both approaches contain drawbacks. The first can be accused of taking paternalistic approaches to working with communities, often expecting communities to integrate into the structures built by those authorities. It tends to use community engagement as a checkbox, often manifesting in one-directional, uneven relationships that can, in poorly managed scenarios, result in strife or reliance.²⁵³ The second can be considered an arm of the “bootstrap” mentality that fails to recognize how inequities (e.g., lack of generational wealth, past communal traumas like genocide and racial and ethnic discrimination) might leave a community with very limited resources and relative isolation from critical information—which could be improved by stronger linkages to sources of wealth and information like government representatives or large companies.²⁵⁴

Scholarship produced by Daniel Aldrich, in particular, has engaged with both camps in a focus on the social capital in communities before, during, and after disasters as predictors of community resilience throughout the disaster cycle, notably in Japan.²⁵⁵ Aldrich’s research found that social capital, which he defines as the strength and scope of social ties, interactions, and shared experiences in one’s networks, is a significant indicator of survival and recovery outcomes. He challenges research traditionally focused on factors like wealth, severity of damage, and efficacy of government in determining outcomes post-disaster and claims that social capital is a better indicator for measuring results like the likelihood of safe evacuation or length of recovery.²⁵⁶ Aldrich examines two types of social capital, as outlined in Figure 6:

1. Lateral “bonding” social ties (an “inner social circle” often sharing common relationships, location, or ethnicity) and “bridging” social ties (the “outer social circle” where various inner circles are connected via workplaces, congregations, and associations) and

²⁵³ Arnstein, “A Ladder of Citizen Participation.”

²⁵⁴ Thad Williamson, “Beyond Social Capital: Social Justice in Recovery and Resilience,” *Risk, Hazards & Crisis in Public Policy* 4, no. 1 (2013): 28–31, <https://doi.org/10.1002/rhc3.25>.

²⁵⁵ Aldrich, *Building Resilience*.

²⁵⁶ Daniel P. Aldrich, “PrepTalks: Social Capital in Disaster Mitigation and Recovery,” FEMA.gov, 8, accessed August 22, 2019, <https://www.fema.gov/preptalks/aldrich>.

- Vertical ties, with sources of power (government, press, corporations, or other sources of authority, wealth, information).²⁵⁷

Aldrich emphasizes that a lack of vertical ties between recovering individuals, communities, and government—and poor alignment between these sectors, which leads to duplication and gaps in services—contributes to poor recovery outcomes.²⁵⁸ His research suggests that maximal recovery and survival outcomes derive from combinations of lateral and vertical ties—enmeshing both camps of relationship-building between government and nongovernment. The importance of establishing vertical and lateral linkages based on Aldrich’s work further confirms the need for all three sectors outlined to be involved in community-led LTR coalitions as distinct but critical vertical and lateral linkages.

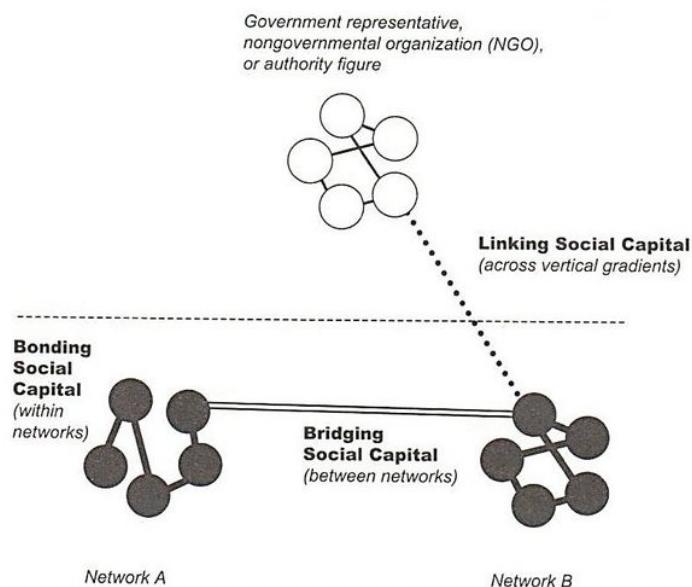


Figure 6. Lateral Social Capital (Bonding and Bridging) and Vertical Social Capital (Linking) in Post-Disaster Landscapes. Source: Aldrich (2012).²⁵⁹

²⁵⁷ Aldrich, “PrepTalks: Social Capital in Disaster Mitigation and Recovery.”

²⁵⁸ Aldrich, *Building Resilience*.

²⁵⁹ Aldrich, 34.

2. Challenging Integration

FEMA's whole community approach remains largely in the arena of principles meant to inform EM. It has not resulted in well-funded, strategic integration into the disaster cycle. This can be seen from lessened funding for programs like Citizen Corps, poor resource allocation and alignment with community-based organizations, and struggles to improve individual/community preparedness and recovery timelines and experiences.²⁶⁰ The inability to assign proper resources, and maintain funding for, the whole community approach has echoes across the five mission areas of the National Preparedness Goal, with extensive impact on LTR. Another issue with operationalization is that community-led LTR coalitions often see their development after an incident, characterized by restricted funding and time for their formation. Ideally, funds would be earmarked to establish these coalitions pre-disaster, with additional resources designated for their activation post-disaster. Recovery processes could be “greatly enhanced by facilitating—and funding—timely pre- and post-disaster planning at the community level to inform and empower recovery actors.”²⁶¹

While each LTR stakeholder sector developed from similar needs, attempts to integrate them—especially during recovery—have faced significant barriers. Assessments of ICS have found “integration of non-government” as one of the weakest attributes of the model.²⁶² Attempts to align ICS and VOAD show similar findings.²⁶³ Emergent systems outside of VOAD have faced even greater challenges in aligning with government EM. One notable case post-Katrina cites the failure to work with emergent community organizations, which are credited with offering the bulk of recovery assistance, as one of the disaster’s major deficiencies.²⁶⁴ Issues attributed to poor integration include varying

²⁶⁰ Egan and Tischler, “The National Voluntary Organizations Active in Disaster Relief and Disaster Assistance Missions.”

²⁶¹ Olshansky and Johnson, “The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters,” 301.

²⁶² Cole, *The Incident Command System: A 25-Year Evaluation by California Practitioners*, 216–22.

²⁶³ Egan and Tischler, “The National Voluntary Organizations Active in Disaster Relief and Disaster Assistance Missions,” 67.

²⁶⁴ Drabek, *The Human Side of Disaster*, 141.

language/culture, poor understanding of missions/services, and legal/financial concerns such as licensing, liability, and fund management.²⁶⁵ These issues often arise in the immediate aftermath of a disaster and compound throughout LTR.

The primary challenges behind the development of community-led LTR coalitions across sectors appear to be breaches in trust and misunderstanding (which can be further addressed through the building of social capital). As a regional VOAD leader, Aaron Titus, explained in a FEMA PrepTalk, “We have trained emergency management and law enforcement to look into the community after disasters and see a pyramid constellation where they are on top.”²⁶⁶ In Titus’ analyses of tensions between sectors, the misdirection of governmental EM towards nongovernmental providers is prominent; however, the quote also captures his own, perhaps biased, perceptions of EM as an innately command-and-control field. As previously outlined, EM should be designed to mesh networks and hierarchies, though perhaps the EM practitioners that Titus knew had failed to do so. His words reveal what is perceived as fundamental differences in ethos in practice, even if scholarship may have evidence to show alignment between these sectors in theory.

Titus acknowledges that practitioners must better understand that, like good competitors and collaborators, “we each have something that others want and we all want something that others have.”²⁶⁷ He urges governmental EM to “let the community lead,” because communities can serve where the government cannot. He outlines how “each group has its own responsibilities, resources, expertise, and authorities,” which means that “we must recognize and respect our different stewardships.”²⁶⁸ The barriers to recognizing these potentially complementary stewardships are significant. However, that should not

²⁶⁵ Cole, *The Incident Command System: A 25-Year Evaluation by California Practitioners*; Egan and Tischler, “The National Voluntary Organizations Active in Disaster Relief and Disaster Assistance Missions”; Barsky and Horan, “Volunteers and Nonprofits in Disaster.”

²⁶⁶ Aaron Titus, “PrepTalks: Let the Community Lead: Rethinking Command and Control Systems,” FEMA.gov, December 10, 2019, <https://www.fema.gov/preptalks>.

²⁶⁷ Titus.

²⁶⁸ Titus.

deter attempts to build community-led LTR coalitions. Because, as Titus observes, when practitioners fail to work across sectors, “the primary losers are the survivors we serve.”²⁶⁹

This chapter used the Cynefin framework to situate the wicked problems of LTR, and the proposed approach to those wicked problems through community-led LTR. Given that the recommended approach to wicked problem recommends multi-stakeholder groups, the chapter then outlined the primary sectors of LTR stakeholders: governmental EM, nongovernmental EM, and emergent groups. Each of those sectors offered their own attempts at community-led LTR coalitions, which were introduced to sketch the landscape of relevant models for this approach. Last, the chapter engaged with the principles that support and realities that challenge the integration of multiple stakeholders into community-led LTR coalitions. As was outlined, several principles that play out in discourses around EM, support integration, notably: the balance between centralization and decentralization through hybrid hierarchy-network models in EM and other structures like the military; the meshing of EM’s values of the Whole Community Approach and broader grassroots organizing, specifically broad-based organizing; and the ways that vertical and lateral social capital linking impacts recovery and survival outcomes. The challenges explored cover mostly issues of trust that come from lack of understanding and cultural barriers between sectors. These challenges and supports are further explored in Chapter 6. They are presented here to lay a foundation for the case study of community-led LTR coalitions in NYC, which will be expounded in Chapters 4 and 5.

²⁶⁹ Titus.

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IV. INTRODUCTION TO THE CASE STUDY: HURRICANE SANDY IN NEW YORK CITY

It is over three years since Sandy flooded your home. You are a single mother on the Rockaway peninsula in NYC, working full-time while caring for your toddler. You have been living in an apartment away from home since October 2012. You pay its rent and the mortgage on your damaged property each month, which together surpass your monthly income. You enrolled in the city's housing recovery program, Build it Back (BIB) and have awaited repairs for over two years. You heard that the program has been mired in issues, causing serious delays and constant changes in requirements. Also, BIB does not offer temporary housing (yet). You can no longer support yourself and your child. You have fallen behind on mortgage payments and received the notice that can precede foreclosure (which would disqualify you from BIB). You enroll in a nonprofit disaster case management (DCM) program, and it connects you to a legal services organization in its local coalition. A pro-bono lawyer who advocates temporary housing for cases like yours looks into the foreclosure notice.

Or, you are a retiree living in Brooklyn with your spouse in the livable part of your Sandy-damaged home. In addition to more repairs, you are awaiting a home elevation with BIB, which physically raises the foundation of your home above base flood elevation and onto pilings. However, you are thinking of turning the elevation down to expedite your repairs and avoid further displacement. You have a low fixed annual income and expenses to treat your wife's cancer have grown. You don't understand the changes in flood zones in your neighborhood—informational materials have been confusing because English is your second language and the content is very complicated. You attend an event hosted by

As outlined in the Research Design section of Chapter 1, interviewees are anonymous to preserve the honesty and integrity of responses. Direct quotes from interviews are thus included in this chapter without a citation. Every quote from an interview includes a reference to an “interviewee.” The analysis also clearly denotes contributions from one or more of the five individuals who participated in 90-minute, in-depth interviews. These five individuals were selected for their leadership role in one of the following LTRGs in NYC: Brooklyn Long-Term Recovery Group, Bronx Long-Term Recovery Group, Lower East Side Ready! Long-Term Recovery Group, Queens Recovery Coalition, and the Staten Island Interfaith and Community Long-Term Recovery Organization.

a nonprofit housing organization, where you learn (from materials distributed in your native language) that your flood insurance rate is increasing. Through these forums, you connect to a case manager who helps you decide to take the subsidized elevation offer.

Or, you are a Staten Islander working to support your adult son, who has a disability. You are living in a hotel, though a few weeks ago you were in your damaged home without electricity or running water, taking showers at a local YMCA and using a bucket as a toilet. You thought your repairs would be covered by FEMA individual assistance and insurance, but you were victims of contractor fraud that misused those funds. A neighbor referred you to a rebuilding organization that still serves Sandy-impacted homes. When staff surveyed the conditions you were living in, the organization agreed to take on repairs and referred you to the Long-Term Recovery Organization (LTRO). That same day, the LTRO connected you to a member housing organization to secure a hotel, a member congregation to provide moving funds, a member legal services organization to look into the contractor fraud, and a member health agency for your personal, acute mental health need. The LTRO placed you with a case manager, who is making a case for funds for unpaid utilities, mold remediation, and repairs to an unmet needs roundtable (UNR). Your case was vetted and approved by the VOAD agencies that disperse funds there.

These stories are taken from cases reported by LTRGs who served in LTR from Sandy in NYC. There are many more cases in those materials: an undocumented renter evicted from their flooded apartment who, without legal recourse, took their family into a homeless shelter; an older adult whose child misused their recovery benefits in their battle with addiction; a family in an attached home who had to turn down a BIB offer because their neighbor would not sign off on the repairs and elevation; and a person immobilized in their home, afraid to remove water-logged items, as they struggled with a hoarding disorder. These anonymous cases were compiled by community-led LTR coalitions and their member organizations into reports and testimonies—notably in a series of materials

provided to NY City Council—to demonstrate need in the communities they served.²⁷¹ They are included because their complexities demonstrate how the wicked problems outlined thus far play out on the ground with disaster-impacted individuals during LTR. They also show the role of community-led LTR coalitions in coordinating the delivery of services, resolving inequities, and filling in at critical gaps when government funds encountered red tape or after the dispersal of benefits. This chapter introduces the community's LTR coalitions that are the focus of the primary qualitative research findings in Chapter 5. It sketches the landscape of Sandy's LTR, introducing the five community-led coalitions selected for qualitative analysis, and leveraging scholarship and direct sources to fill in the gaps of qualitative analysis drawn from publicly available materials.

A. THE STORM

On October 29, 2012, several weather systems “collided over the most densely populated region in the nation” in the Northeastern coast of the US.²⁷² The storm had grown to a massive size and, merging with other storm systems, ended up producing a devastating combined “superstorm.”²⁷³ One of those weather systems was Sandy, which had been downgraded to a Category One hurricane before making landfall as a post-tropical cyclone.²⁷⁴ While technically the disaster was from “Superstorm Sandy,” “Hurricane Sandy” or simply “Sandy” appears here because it reflects the parlance of many survivors and recovery workers who reference it as such in materials and interviews. FEMA’s after-

²⁷¹ New York City Long Term Recovery Coalition, “Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8,” Public Comment (New York City Long Term Recovery Coalition, January 19, 2015), <https://sisandyhelp.org/wp-content/uploads/2014/12/NYC-Long-Term-Recovery-Coalition-Comments-to-Build-it-Back-Proposed-Action-Plan-Amendment-8.pdf>; Staten Island Interfaith and Community Long Term Recovery Organization, “Grassroots Collaboration for Disaster Preparedness”; Center for NYC Neighborhoods, “Rising Tides, Rising Costs: Flood Insurance and New York City’s Affordability Crisis” (Center for NYC Neighborhoods, September 2014).

²⁷² Hurricane Sandy Rebuilding Taskforce, “Hurricane Sandy Rebuilding Strategy: Stronger Communities, A Resilient Region,” Task Force Report (United States Department of Housing and Urban Development, August 2013), 13.

²⁷³ National Weather Service, National Oceanic and Atmospheric Administration, and United States Department of Commerce, “Hurricane Sandy,” Weather.gov, accessed December 28, 2019, <https://www.weather.gov/okx/HurricaneSandy>.

²⁷⁴ Hurricane Sandy Rebuilding Taskforce, “Hurricane Sandy Rebuilding Strategy,” 13.

action report, NYC's after-action report, the national Hurricane Sandy Rebuilding Task Force, and NYC Council's Hurricane Sandy Houses of Worship and Charitable Organizations Recovery Taskforce also refer to "Sandy."

Sandy caused widespread flooding from unprecedeted storm surge for the region, along with heavy rains and winds, damaging more than 650,000 homes, leaving 8.5 million without power, contributing to widespread fuel shortages, and causing at least 162 deaths in the U.S. (out of 233 deaths in other countries).²⁷⁵ On the evening of October 29, Sandy's storm surge reached peaks of eight to nine feet, with some experiencing water retention up to fourteen feet.²⁷⁶ Seventeen percent of the city experienced unprecedeted and rapid flooding—with approximately 99,000 buildings, 405,000 residential units, and more than one million people in the surge zone, and two million people without power.²⁷⁷ In addition, 26 public housing developments (containing 45,000 residents), six acute-care hospitals, one psychiatric hospital, 22 nursing homes, and 18 adult care facilities lay in the surge zone.²⁷⁸ While the mayor announced an evacuation order prior to the storm requiring 375,000 New Yorkers to leave—which was “only the second general population evacuation in the City’s history”—only 29% of surveyed New Yorkers reported evacuation.²⁷⁹ The 43 deaths are often attributed to the low evacuation rate, which may have been caused by little collective knowledge of coastal storms, poor communication, financial, physical, and language barriers, and the perception of past evacuation notices as

²⁷⁵ Hurricane Sandy Rebuilding Taskforce, “Hurricane Sandy Rebuilding Strategy”; Federal Emergency Management Agency, “Hurricane Sandy FEMA After-Action Report” (Federal Emergency Management Agency, July 1, 2013), https://www.fema.gov/media-library-data/20130726-1923-25045-7442/sandy_fema_aar.pdf.

²⁷⁶ Hurricane Sandy Rebuilding Taskforce, “Hurricane Sandy Rebuilding Strategy”; National Weather Service, National Oceanic and Atmospheric Administration, and United States Department of Commerce, “Hurricane Sandy”; Erin Kehoe, “The City of New York Action Plan Incorporating Amendments 1-19 for Community Development Block Grant-Disaster Recovery Funds” (New York City Office of Recovery, December 21, 2018), https://www1.nyc.gov/assets/cdbgdr/documents/CDBG-DR_1-19_actionplan2.pdf.

²⁷⁷ Linda I. Gibb and Caswell F. Holloway, “Hurricane Sandy After Action Report and Recommendations to Mayor Michael R. Bloomberg” (Office of the Deputy Mayor of the City of New York, May 2013), http://www.nyc.gov/html/recovery/downloads/pdf/sandy_aar_5.2.13.pdf; Center for NYC Neighborhoods, “Rising Tides, Rising Costs.”

²⁷⁸ Gibb and Holloway, “Hurricane Sandy After Action Report and Recommendations to Mayor Michael R. Bloomberg.”

²⁷⁹ Gibb and Holloway, 8.

“hyped up,” among other theories.²⁸⁰ These possible causes are important to understand as some of their patterns also played out in Sandy’s LTR.

Media, practitioners, and survivors have referenced the period following Sandy as “the disaster after the disaster.”²⁸¹ All five of NYC’s boroughs experienced LTR from Sandy, though impacts varied by borough. Brooklyn had the highest population hit, at 310,227, with Manhattan at 230,742, Queens at 188,444, Staten Island at 75,651, and the Bronx at 40,992.²⁸² Staten Island had the highest percentage of population affected at 16 percent, with Manhattan at 14.5 percent, Brooklyn at 12.4 percent, Queens at 8.4 percent, and the Bronx at 3 percent.²⁸³ For the sake of this analysis, LTR from Sandy began in the first six months after Sandy (between January and June 2013) and continues through the writing of this thesis (January 2020, over seven years after Sandy). This period was selected using the template provided by the NDRF, which identifies LTR as “months-years” after an incident. January 2013 was also selected because it was when major tranches of LTR funding were approved for NYC, notably through its first CDBG-DR action plan.²⁸⁴ LTR is marked as “in continuation” in January of 2020 because CDBG-DR funds are still being distributed through NYC’s BIB program, with families still displaced.²⁸⁵

B. THE SANDBOX IN NYC

Each of the three sectors outlined in Chapter 3 contributed to Sandy recovery efforts. This section will give a brief overview of the primary players in the community

²⁸⁰ Gibb and Holloway, 8.

²⁸¹ Staten Island Interfaith and Community Long Term Recovery Organization, “Testimony of the Staten Island Interfaith and Community Long Term Recovery Organization Before the New York City Council Committee on Recovery and Resiliency”; New York City Long Term Recovery Coalition, “Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8”; Reese May, “Sandy Recovery & the Disaster Recovery ‘Industry,’” *Huffington Post*, October 28, 2016, https://www.huffingtonpost.com/entry/sandy-recovery-the-disaster-recovery-industry_us_58135281e4b09b190529c353.

²⁸² Kehoe, “The City of New York Action Plan Incorporating Amendments 1-19 for Community Development Block Grant-Disaster Recovery Funds.”

²⁸³ Kehoe.

²⁸⁴ Kehoe.

²⁸⁵ Amanda Farinacci, “Sandy Repairs Are Still Keeping a Coney Island Family from Their Home,” *Spectrum News - NY 1*, January 3, 2020, <https://www.ny1.com/nyc/brooklyn/news/2020/01/03/build-it-back-repairs-are-still-keeping-a-coney-island-family-from-their-sandy-damaged-home>.

LTR landscape post-Sandy. Its purpose is to orient the reader to the many entities referenced in the materials and interviews used for the qualitative analysis in Chapter 5.

1. Governmental EM

On the federal level, FEMA plays a primary role in community LTR (as outlined in Chapter 3). This manifested in the wake of Sandy in a litany of programs. First, FEMA had released the NDRF shortly before Sandy (in 2011) and attempted to implement some of its principles in facilitating more streamlined LTR. In the NDRF's approach, coordination begins at the national level, convening federal, state, and local government around common aims and clear roles.²⁸⁶ In December 2012, president Barack Obama signed an executive order to create the Hurricane Sandy Rebuilding Task Force as an implementation of the NDRF.²⁸⁷ The task force convened for the purpose of “reducing red tape and regulatory burden” and ensuring “resources are aligned with local priorities,” bringing “federal, state and local officials, community and stakeholder groups and the private sector together to make local rebuilding visions a reality.”²⁸⁸ It can be argued that it failed to meet these aims, but it still reflected a new FEMA role in wrangling governmental EM for recovery.

In addition, FEMA continued to act as a convener of the National Flood Insurance Program (NFIP), in which subsidized insurance claims were paid via private reimbursement to 144,440 policyholders. In addition, FEMA hosted the Individual and Household Assistance Program to fill gaps in support where insurance coverage was not adequate—notably, for temporary housing, repairs, goods, and other expenses up to \$33,000.²⁸⁹ This program was predominantly a feature of early and intermediate recovery, though the use of these funds often extended into LTR. Community LTR was also

²⁸⁶ Federal Emergency Management Agency, *National Disaster Recovery Framework*.

²⁸⁷ Hurricane Sandy Rebuilding Taskforce, “Hurricane Sandy Rebuilding Strategy.”

²⁸⁸ United States Department of Housing and Urban Development, “Hurricane Sandy Rebuilding Task Force: Aligning Federal Support and Cutting Red Tape,” HUD.gov, accessed December 27, 2019, <https://www.hud.gov/sandyrebuilding/federalpartners>.

²⁸⁹ Federal Emergency Management Agency, “Hurricane Sandy FEMA After-Action Report.”

supported by FEMA through public assistance to organizations and businesses.²⁹⁰ The presence of FEMA VALs—who attended community meetings and worked with local nongovernmental organizations—was also significant in LTR.²⁹¹ A number of other FEMA initiatives, staff, and programs had impacts on LTR (such as the materials offered through the community LTR toolkit and other online resources), though the above programs and roles were the most significant of FEMA offerings in LTR.

Other federal agencies played significant roles in LTR. By July 2013, the rebuilding task force was reporting the top contributions by FEMA and SBA, which “had helped more than 270,000 individuals or households and 3,900 businesses to get back on their feet through \$3.8 billion in SBA recovery loans and FEMA individual assistance.”²⁹² The Social Service Block Grant–Hurricane Sandy Supplemental Grant provided another major source through the federal Health and Human Services. A number of other federal agencies, including Department of Labor, Department of Education, Environmental Protection Agency, and Department of Veteran Affairs, also offered special programs for communities recovering from Sandy.²⁹³ However, as outlined, HUD was perhaps the most significant player in community LTR, given the immense funds allocated by Congress via CDBG-DR through state and city government in New York.

On the state level, the Governor’s Office of Storm Recovery and other affiliated offices leveraged federal, state, and private funds to set up a number of initiatives. Much of those funds went to areas in New York outside of NYC, but also offered support to the city. A part of HUD’s CDBG-DR allocations for the state (\$4.4 billion) were implemented in NYC through the NY Rising Housing Recovery Program “Neighborhood Committees.” Community partners were tasked with holding public meetings, gathering recovery and mitigation projects from stakeholders, and voting on projects by neighborhood.²⁹⁴ Projects developed through this process in NYC included a home elevation pilot program hosted by

²⁹⁰ Federal Emergency Management Agency.

²⁹¹ Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force.”

²⁹² Hurricane Sandy Rebuilding Taskforce, “Hurricane Sandy Rebuilding Strategy,” 13.

²⁹³ Hurricane Sandy Rebuilding Taskforce, “Hurricane Sandy Rebuilding Strategy.”

²⁹⁴ Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force.”

a nonprofit, a flood insurance auditing service for homeowners, redevelopment of community spaces and waterways (e.g., revitalization of oyster communities as natural sea berms), and the funding of COADS.²⁹⁵ The state also received HSS-funded SSBG-Sandy supplemental funds which went to a DCM program managed by Catholic Charities, disaster-focused health and mental health services, and legal/financial services.²⁹⁶

In addition to state allocations, the City of New York received approximately \$4.2 billion from HUD.²⁹⁷ A significant portion was allocated to the NYC Mayor’s Office of Housing Recovery Operations, which formed BIB. The program is still active, claiming to have completed 5,269 constructions and 2,683 reimbursements as of December 31, 2019.²⁹⁸ The city also established an office of recovery and resilience (now the Office of Resilience) to carry out supportive mitigation projects. The City offered “rapid repairs,” along with a fund set up by the mayor to leverage private money for early recovery, although some remained into LTR.²⁹⁹ City agencies also served in recovery, though NYC Emergency Management Agency (NYCEM) notably focused on response and early recovery without a significant LTR role beyond remaining connected to some LTRGs. The NYC Department of Health and Mental Hygiene (DOHMH) maintained some LTR competencies via funding of mental health services, sampling of land and air quality, information on remediation of environmental hazards like mold, and some support for human services organizations serving in recovery via funding. Other city agencies—such as the New York City Housing Authority, the Department of Buildings, and the Department of Housing Preservation and Development—also served in LTR via informational programs, funding, or LTR-specific services to their customers.³⁰⁰

²⁹⁵ Accamando and Lindsey.

²⁹⁶ Accamando and Lindsey.

²⁹⁷ Accamando and Lindsey, 12.

²⁹⁸ New York City Mayor’s Office of Housing Recovery Operations, “Build It Back - Sandy Funding Tracker,” NYC.gov, accessed January 17, 2020, <https://www1.nyc.gov/content/sandytracker/pages/build-it-back>.

²⁹⁹ Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force.”

³⁰⁰ The author is knowledgeable of the roles of these local agencies through professional experience in Sandy LTR in NYC and through her current position at NYC DOHMH.

2. Nongovernmental EM

After Sandy, NYC's EM-focused nongovernmental organizations were involved, for the most part, in national, New York State, and/or NYC VOAD. Table 1 indicates their various affiliations with VOAD, as compiled from the membership directories of VOAD at that time, cross-referenced with the membership of community-led LTR coalitions in NYC and the author's professional knowledge of these organizations from her experiences in Sandy LTR.

Table 1. Examples of VOAD-Member, Nongovernmental EM Organizations Serving Sandy LTR in NYC

<i>National Members with Services in NYC</i>	<i>National Members with Chapters in NYC</i>	<i>National Members with Judicatories/Faith-Based Agencies in NYC</i>	<i>NY and NYC Members Founded and Serving Locally</i>
All Hands Volunteers Buddhist Tzu Chi Foundation Church World Service Hope Coalition America Islamic Circle of North America Islamic Relief USA Latter Day Saints Charities Mennonite Disaster Service National Baptist Convention - Disaster Relief NECHAMA Jewish Disaster Response Corp Jewish Federations of North America SBP Team Rubicon United Way	American Red Cross of Greater NY Habitat for Humanity NYC Rebuilding Together NYC Salvation Army of Greater NY	Catholic Charities USA and the Archdiocese of NY / Dioceses of Brooklyn and Queens Episcopal Relief & Development and the Episcopal Diocese of NY Disaster Response Lutheran Disaster Response and Lutheran Social Services of NY Presbyterian Disaster Assistance and the Presbytery of NYC United Methodist Committee on Relief and the NY Annual Conference	NY Disaster Interfaith Services Human Services Council NY Cares

The author is cognizant of the roles of these agencies through professional experience in Sandy LTR in NYC and through her current position at NYC DOHMH.

Table 1 demonstrates the various ways that organizations with international, national, and local experience in EM supported Sandy LTR. It includes national VOAD

member organizations that deployed teams, offered services, or set up programs in NYC; national VOAD members that worked through their pre-existing state or city chapters to offer services; national faith-based organizations that worked with local or regional judicatories/congregations/agencies of their tradition; and NY and NYC VOAD member organizations with a history of emergency response and recovery (some in LTR from 9/11).

VOAD members offered significant services to LTR efforts. Notable among these are the DCM program managed by Catholic Charities and distributed among several local case management agencies and an UNR managed by a local organization called New York Disaster Interfaith Services (NYDIS) that collected monies from several VOAD agencies to fund services and goods for families. Member organizations also collaborated within and outside these citywide coordinating mechanisms to manage volunteers, facilitate rebuilding projects, provide legal services, offer health and mental health support, gather and distribute donations, and directly fund affected households. To aid survivors in accessing funds, DCM/legal services organizations collectively distributed \$13.8 million for over 23,539 cases (which is 15% of the 153,871 New Yorkers registered for FEMA assistance).³⁰¹ For much of LTR from Sandy, there was no formal relationship between National/NY/NYC VOAD and the community-led LTR coalitions explored in this analysis. However, several VOAD members various took part in and brought resources to these coalitions.

3. Emergent Groups

Emergent groups are collections of individuals and organizations that offer emergent disaster-specific services to a community. Emergent groups had a significant presence in NYC in the wake of Sandy, serving at the citywide, borough-wide, and neighborhood levels. They represent individual entities, such as nonprofits, businesses, congregations, associations, and leaders, and groups of these entities. Russell Dynes has offered categorizations within the sector of emergent groups that describe the degree of

³⁰¹ Reporting reflects data as of June 30, 2017. See New York Disaster Interfaith Services, “NYC Sandy Unmet Needs Roundtable Assistance & Statistics Report Inception 03.01.13 to 6.30.17,” 1.

their emergence.³⁰² For the sake of this study, the classification of emergent groups concerns the varying formality of their structures (from registered nonprofit to informal group). For this LTR landscape, their “emergence” was their provision of LTR services without pre-existing LTR experience. Based on this definition, four types of emergence occurred in the wake of Sandy: (1) pre-existing, community-based entities that offered emergent LTR services, (2) new, community-based entities that offered emergent LTR services, but grew from pre-existing community-based entities, (3) new, community-based entities that offered emergent LTR services and did not develop from pre-existing community-based entities, and (4) non-community-based entities that offered emergent LTR services that came from neighboring communities, states, or nations to support.³⁰³

Of these four categories, city leadership recognized the first type of emergent group for their critical position in recovery. After Sandy, NYC’s then Public Advocate, Bill de Blasio, acknowledged that these emergent, community-based organizations “far exceeded their primary role as ‘safety net’ social service providers” and filled major gaps in government response and recovery.³⁰⁴ Following interviews with community-based organizations and city agencies, the public advocate asserted that community-based organizations saved lives in the critical 72-hour period following the incident and continued to serve their communities through long-term recovery and preparedness efforts.³⁰⁵ He acknowledged that they leveraged the community relationships built in response to every-day emergencies to respond to large-scale incidents.

For the second type of emergent entity, several networks grew among organizations that were not traditionally EM-focused, but played critical new roles in Sandy LTR. Notably, this occurred among organizations focused on mental health, legal services,

³⁰² Russell Dynes, *Organized Behavior in Disaster* (Lexington, MA: Heath Lexington Books, 1970).

³⁰³ These categories were drawn from the rosters of community-led LTR coalitions, references from interviews, and the professional experience of the author.

³⁰⁴ Bill de Blasio, “Supporting Community-Based Disaster Response: Lessons Learned from Hurricane Sandy” (Office of the Public Advocate for the City of New York, June 2013), 2, <http://archive.advocate.nyc.gov/sandy>; Bill de Blasio was Public Advocate (2010-2013), which is an elected citywide “ombudsman” position, but is now the Mayor of New York City (2014-present).

³⁰⁵ de Blasio, 1.

financial aid, and advocacy, specifically around housing, immigration, climate change, poverty, addiction, and racial equity. Mental health organizations across the city collaborated via funds from the State, NYC DOHMH, and HHS-SAMHSA. Networks of legal and advocacy groups emerged around Sandy-specific issues—including the New York Legal Assistance Group, New York Legal Services, The Legal Aid Society, the New York Mortgage Coalition, the Center for New York City Neighborhoods, the Affordable Neighborhood Housing Development Corp, NYC Environmental Justice Alliance, the Alliance for Greater New York, the Alliance for a Just Rebuilding, the NYC Housing Advocacy Group, and Faith in Action. Similar advocacy groups convened at the local level, such as the Staten Island Alliance and the Rockaway Youth Task Force.³⁰⁶ Another significant entity that played a role in this category was Occupy Sandy, which was affiliated with the Occupy Wall Street movement in NYC. Occupy Sandy was involved in nearly every neighborhood, claiming to have organized over 60,000 volunteers to canvass, raise funds, organize donations, and facilitate a score of other classic post-disaster emergent services.³⁰⁷ They completed these tasks in a decentralized approach in which “there were no leaders, no bureaucracy, no regulations to follow, no pre-defined mission, charter, or strategic plan.”³⁰⁸ Informal chapters of Occupy Sandy arose in every borough, leveraging platforms like Facebook, Twitter, WePay, and open-source crowdsourcing applications to mobilize volunteers and get out information.³⁰⁹

For the third type of emergent group, several community-based groups formed on their own without formal affiliation with an established community-based entity, movement, or VOAD organization. These organizations predominantly focused on: donations gathering and management; volunteer mobilizing; and housing recovery through cleanups, mucking, mold remediation, home repairs, and landscaping, among other

³⁰⁶ These categories were drawn from the rosters of community-led LTR coalitions, references from interviews, and the professional experience of the author.

³⁰⁷ Daniel Kaniewski, “The Resilient Social Network @occupysandy #superstormsandy” (Falls Church, Virginia: Department of Homeland Security Science and Technology Directorate, September 30, 2013), 25.

³⁰⁸ Kaniewski, 25.

³⁰⁹ Kaniewski, 25.

tasks.³¹⁰ These groups tended to be hyper-local. For example, on Staten Island, new groups were formed to give out donations from a tent after Sandy and continued to recovery and to do cleaning and repairs of homes.³¹¹ These groups often leveraged the same social media and crowdsourcing platforms as other emergent groups like Occupy Sandy. While uncommon, some emergent groups came from out of town to form the fourth category of emergence, but for the most part these groups did not last as long as community-based emergent entities in LTR.³¹²

C. INTRODUCTION TO COMMUNITY-LED LTR COALITIONS IN NYC

This section review why LTRGs were chosen as the community-led LTR coalitions for this study and demonstrate how they manifest a multi-stakeholder coalition. It also orients the read to the specific LTRGs in NYC at the center of this study, including their coalitions' origins, missions, and primary functions. Last, it introduces the interviewees and the role and primary functions that they contributed to the LTRG they represent.

1. Relevance to Study and Purpose for Selection

Community-led LTR coalitions filled critical roles in recovery efforts in the wake of Sandy. Led by community organizations and leaders, they often brought together representatives from the three major sectors of LTR practitioners: governmental EM, nongovernmental EM, and emergent groups. They claimed to have served disaster survivors “in almost every affected neighborhood in NYC” through “strong community partnerships and local credibility, along with the economic benefits of donations and volunteer mobilization.”³¹³ They predominantly coordinated DCM, home repair, legal services, financial counseling, and health and mental health support, among other services.

³¹⁰ New York Disaster Interfaith Services, “2015 Hurricane Sandy Voluntary Rebuild Environment: NYC Long Term Recovery Assessment,” 2015.

³¹¹ Jordan Klepper, “Hurricane Sandy Survivors’ Long Wait for Housing,” *The Daily Show with John Stewart*, March 12, 2015, <http://www.cc.com/video-clips/sde6jc/the-daily-show-with-jon-stewart-hurricane-sandy-survivors--long-wait-for-housing>.

³¹² These categories were drawn from the rosters of community-led LTR coalitions, references from interviews, and the professional experience of the author.

³¹³ New York City Long Term Recovery Coalition, “Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8,” 11.

For the most part, they used the LTRG model that was described in Chapter 3—which is a nationally implemented community-led LTR coalition model that coordinates a diversity of LTR services across emergent groups, nongovernmental EM, and governmental EM sectors. LTRG founders mostly accessed the model through LTR guides released by VOAD and VOAD member organizations like the Church World Service.³¹⁴ Organizers also formed LTRGs through exposure to FEMA VALs or VOAD agencies.

In testimonies, they claimed the following strengths: (1) in-depth knowledge of unmet needs among hard-to-reach populations, (2) mapping of a diverse array of services and resources, (3) trust and credibility on the ground in communities, and (4) “collaborative, creative solutions and partnerships” from local force multipliers.³¹⁵ In a 2015 survey of LTR organizations, respondents reported a total of 18,000 housing recovery projects completed, leveraging 41,721 volunteers, with volunteer labor valued at \$20.3 million.³¹⁶ Over 72% of those organizations self-reported as members of LTRGs, as noted in Figure 7.³¹⁷ LTRGs spearheaded several canvassing efforts over the first five years of LTR that provide insight into this perspective. One canvassing carried out by the “Lower East Side Ready!” LTRG found that 62% of respondents “did not receive any relief from the government or other ‘official’ sources,” with 15% receiving assistance from FEMA, 12% from the American Red Cross, and 11% from a NYC government agency.³¹⁸ Comparatively, 57% reported assistance from “community sources,” with 28% from a

³¹⁴ Church World Service Emergency Response, *Managing & Operating a Disaster Long-Term Recovery Organization: A Capacity Building Guidebook*; National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*.

³¹⁵ New York City Long Term Recovery Coalition, “Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8,” 22–23.

³¹⁶ New York Disaster Interfaith Services, “2015 Hurricane Sandy Voluntary Rebuild Environment.”

³¹⁷ New York Disaster Interfaith Services, 16.

³¹⁸ Lower East Side Ready! Long Term Recovery Group et al., *Getting LES Ready: Learning from Hurricane Sandy to Create a Community-Based Disaster Plan for the Future*, 23.

friend/family/neighbor, 27% from community organizations, and 10% from tenant/resident/block associations.³¹⁹ This was mirrored in canvassing by other LTRGs.³²⁰

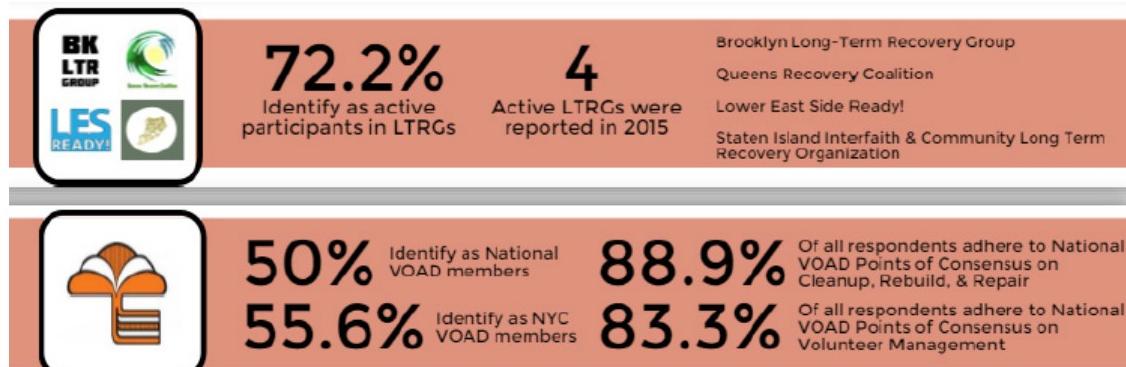


Figure 7. Percentage of Participation in LTRGs and VOAD by Recovery Organizations in NYC. Source: NYDIS (2015).³²¹

LTRGs were chosen as the community-led LTR coalitions for this thesis because of their significant roles in Sandy LTR. Qualitative research was gathered that focused on five community-led LTR coalitions in NYC: Brooklyn Long-Term Recovery Group (BK LTRG), Bronx Long-Term Recovery Group (BX LTRG), Lower East Side Ready! Long-Term Recovery Group (LES Ready!), Queens Recovery Coalition (QRC), and the Staten Island Long-Term Recovery Organization (“SI LTRO”). They were selected because they represented major community-led LTR coalitions, as identified in materials and by FEMA.³²² Notably, at the three-year mark of LTR, these five groups came together to form a citywide Long-Term Recovery Coalition, which produced testimonies that explained

³¹⁹ Lower East Side Ready! Long Term Recovery Group et al., 23.

³²⁰ Staten Island Interfaith and Community Long Term Recovery Organization, “Staten Island Interfaith and Community Long Term Recovery Organization - Home”; Brooklyn Long-Term Recovery Group, “Brooklyn Long-Term Recovery Group - Home,” accessed October 8, 2018, <http://brooklynrecovers.org>; Queens Recovery Coalition, “Queens Recovery Coalition - Feed,” accessed October 18, 2018, [www.queensrecovers.org](http://queensrecovers.org).

³²¹ New York Disaster Interfaith Services, “2015 Hurricane Sandy Voluntary Rebuild Environment.”

³²² Federal Emergency Management Agency, “Long-Term Recovery Groups Help Build Resilient Communities,” FEMA.gov, June 17, 2014, <https://www.fema.gov/disaster/4085/updates/long-term-recovery-groups-help-build-resilient-communities>.

LTRG roles, identified unified advocacy platforms, hosted Sandy events, and compiled case trends. Each interviewee represented one of five LTRGs shown in Figure 8.



Figure 8. Post-Sandy LTRGs in NYC Selected for the Study (by Borough)

These five LTRGs were also selected because they represented five distinct geographic communities with wide variations in human and housing demographics, in addition to an array of issues based on the unique geographies, histories, and socioeconomic needs of their community. They also provided a sample of coalitions in each borough of NYC. Four of the five selected LTRGs (BK LTRG, LES Ready!, QRC, and SI LTRO) served the highest impacted Sandy-affected neighborhoods of the city in terms of severity of damage, number and density of impacted residents, and length of LTR.³²³ The communities served by these LTRGs represent a significant portion of the

³²³ The Lower East Side represents an exception on the “borough” analysis, as it is a neighborhood in the borough of Manhattan; however, its neighborhood experienced the most impact in the borough after Hurricane Sandy; Lower East Side Ready! Long-Term Recovery Group, et al.

400,000 New Yorkers living in flood zones. Several of these coalitions continue to serve these communities in LTR and/or preparedness.

2. LTRGs as Cross-Sector Stakeholder Coalitions

In interviews with LTRG coordinators in NYC, and related materials from their websites, LTRGs can be considered an experiment in the Whole Community Approach.³²⁴ These materials also demonstrate how LTRGs manifest the multi-sector stakeholder coalitions recommended to make sense of and tackle wicked problems, as described in Chapter 2 and 3. One of the unique qualities of LTRGs in NYC was that their membership represented more than small, local organizations with little EM experience. Rather, the organic formula of their membership could integrate a local congregation, a national VOAD agency, and a local ICS-wielding government agency. They thus incorporated puzzle pieces that represent a wide swath of the EM landscape: (1) emergent groups and organizations, and/or grassroots volunteers, (2) National/State/Regional VOAD, and (3) federal, state, and local government agencies. Nearly all of the LTRGs represented by this study were led by community-based organizations/individuals that could be classified as “emergent,” had participation/funding/guidance from VOAD member organizations that represent “nongovernmental EM,” and had some degree of support from governmental EM like FEMA, or state and city agencies that served in LTR.

3. Coalition Origins

The five LTRGs assessed for NYC experienced very different formation stories, as expressed in their interviews and published materials. However, a few commonalities in their development stand out. First, all of the coalitions were exposed to, and adapted, the

³²⁴ East Harlem Community Organization Active in Disaster, “East Harlem COAD - About,” accessed October 10, 2018, <https://www.eastharlemcoad.org>; Lower East Side Ready! Long Term Recovery Group, “LESReady! Long Term Recovery Group of the Lower East Side of Manhattan - Home,” accessed October 15, 2018, <http://lesready.org>; Southern Brooklyn Community Organizations Active in Disaster, “Southern Brooklyn COAD - Nonprofit and Community-Based Coalition - About Us,” Southern Brooklyn COAD, accessed October 18, 2018, <http://southernbkcoad.com/about-us>; Staten Island Non-for-Profit Association, “Staten Island Community Organizations Active in Disaster,” accessed October 20, 2018, <https://www.sinfpa.org/si-coad>; Staten Island Interfaith and Community Long Term Recovery Organization, “Staten Island Interfaith and Community Long Term Recovery Organization - Home”; The Point CDC, “South Bronx Community Resiliency Agenda,” October 10, 2018, <https://thepoint.org/community-development/reenvisioning>.

model of LTRGs often introduced by VOAD members. These models were offered in most case by a national or regional VOAD member that participated in a LTRG, or through related VOAD-produced resources like the LTR Guide. In NYC the VOAD members that shared LTRG resources were predominantly the United Methodist Committee on Relief, Church World Service, and American Red Cross. However, four out of the five interviewed participants had been introduced to those resources through FEMA VALs. In one case, the interviewee said that “FEMA convened a group of community leaders and encouraged us to look at the LTR Manual.” In most cases, however, a coalition had emerged in the wake of the storm organically, and later adapted the structures (and name) of LTRGs.

One interviewee mentioned that prior to using the formal model, meetings were called by a prominent local nonprofit director with “the majority of providers in the neighborhood showing up.” They started to meet four months after the storm, discussing how to best structure their coalition until participation by a FEMA VAL influenced their choice of LTRG. Another interviewee expounded that their coalition arose out of a preexisting “interfaith clergy council” that convened to coordinate their response a week after the storm. The interviewee explained that non-clergy eventually started to come, including: “FEMA VALs, people who work for legal service organizations, mental health organizations, representatives from the major CBOs on the island, and just a lot of good hearted people who were interested in being part of that conversation.” The interviewee of a coalition explained that they formed out an interfaith council and developed in the first few months after the storm. Of the three coalitions that were successful in initiating their LTRG early, most had combined successful existing organizing structures with early exposure to past LTR practices, as shared by FEMA VALs or VOAD, as described by three interviewees. These origins, however, represent a wholly different narrative than those conveyed in the interviews with the other two coalitions that struggled to initiate a successful coalition. Thus, several communities experienced one or multiple “false starts” before forming a relatively effective coalition. This difference is further discussed under the section of “Too Many Leaders, Not Enough Leadership” in this chapter.

4. Coalition Missions and Primary Functions

The mission of each coalition, and its respective goals and primary functions, tended to vary based on the types of impacts on the community and the period in LTR in which the coalition truly organized. However, definitions for LTRG mission, goals, and primary functions appearing in VOAD’s LTR guide, and in related materials, were adapted by several of the NYC-based LTRGs. For example, most LTRGs’ missions contained language that is similar to wording in the LTR guide around “streamlining” and “expediting” recovery for their community by mobilizing a wide array of service providers and equitably distributing resources between member organizations and to impacted individuals.³²⁵ For example, one interviewee shared that the coalition’s mission was to “better coordinate among community-based providers to make resources readily available to—and expedite recovery for—impacted people.” Other interviewees emphasized bringing “advocacy and awareness about recovery” to authorities, member organizations, and impacted communities as their goal. Still other interviewees stated that their mission was focused on supporting their member organizations by helping them secure funds, receive a steady flow of information, and feel less alone in their struggles.

These coalitions identified goals and primary functions that align with the LTR guide, with some deviations. For example, one interviewee noted that their LTRG’s primary functions, as adapted from national models on LTRGs like VOAD materials, were as follows: “At the most basic level, the long-term recovery process involves: 1. Identifying individuals and families with unmet needs in the community, 2. Providing case management in order to prioritize how these needs will be met, 3. Delivering goods, services, and funds to meet these needs.”³²⁶ Another interviewee identified their coalition’s mission as “streamlining recovery” and outlined goals and functions that would be affiliated with an entity that saw itself primarily as a coordinating body: “create service specific committees, convene meetings, and build listservs of people serving in long-term recovery.” Concurrently, the interviewee also saw their coalition’s primary functions as

³²⁵ National Voluntary Organizations Active in Disaster, *Long Term Recovery Guide*.

³²⁶ Staten Island Interfaith and Community Long Term Recovery Organization, “Grassroots Collaboration for Disaster Preparedness.”

keeping the public informed of their work and important recovery information, citing a goal to continuously “send out information that could be public-facing on a website, or providing it to the public at large in other creative ways such as through public events.”

Several interviewees pointed to their coalitions’ use of service-specific committees, taskforces, or local roundtables to reach their primary goals. These subgroups are explored later in this chapter, but are introduced here to demonstrate one way in which LTRGs approached the goals in Table 2. Although these committees give an example of structures that aimed to meet these goals on a continuous basis, these coalitions also rallied around one-time projects. Table 2 outlines the top ten goals and related functions as drawn from an analysis interviewee responses and materials related to their respective LTRGs.

Table 2. Top Ten Goals and Related Functions of LTRGs in NYC

GOALS	RELATED FUNCTIONS	Number of LTRGs Reporting
Provide channels for impacted individuals to be informed of their benefits/rights and share their issues/ideas	Created public websites, listservs, town hall meetings, and service fairs that showcased recovery services Mapped resources/services across coalitions, creating “Resource Directories” or “Social Service Maps”	5/5
Collectively advocate for resources, policy changes, and information	Advocated to elected officials, sources of funding, and other authorities for resources and information Acted as a watchdog of major LTR programs—identifying issues and recommending policy changes Regularly contacted local and national media with stories in attempts to keep recovery in the news	5/5
Offer voices of inspiration and unity to member organizations and impacted individuals	Developed opinion pieces, inspirational speeches, or other strategies to inspire unity among a diversity of community-based leaders Met one-on-one with members to listen to their needs and offer support Created spaces where members “felt less alone” and could discuss problems and share best practices	5/5
Facilitate ongoing assessments of unmet needs and common issues in impacted communities	Mobilized organizations and volunteers to canvass impacted households to assess unmet needs Created shared digital systems, and/or regularly meet, to integrate case data across organizations Helped identify individual and collective unmet needs among service populations	4/5
Coordinate sequence and pace of delivery of services across a diversity of members	Prioritized, batched, and referred cases identified with unmet needs	4/5

GOALS	RELATED FUNCTIONS	Number of LTRGs Reporting
	Created groups to track coordination between rebuilding, case management, mental health/health, legal, financial services, and other support Coordinated multi-agency projects—such as “rebuild” day or volunteer events	
Provide channels for members to be informed of resources, policies, and issues	Created “general assemblies,” “steering committees,” or other structures to regularly bring all members and committees together	4/5
Identify community representatives to citywide recovery forums	Kept informed of opportunities and challenges in the recovery landscape as shared in citywide settings such as NYC VOAD	4/5
Lead coalition members and/or impacted individuals in community-wide visioning —identifying LTR goals, metrics for success, and strategies	Facilitated conversations with organizations and/or community members to identify the “end state” desired for their community Created open forums for discussion of the priorities and goals for the community’s recovery and identifying metrics for success Discussed and explained recovery options for their community—notably discerning between strategies to build back, build stronger, or abandon all or parts of their impacted community	3/5
Secure and more efficiently facilitate limited recovery funds allocated for members or the coalition	Fundraised from individuals and organizations through events, crowdfunding sites, etc. Submitted funding proposals to local and national sources of LTR funding Created mechanisms to distribute funds among member organizations, or to individual cases	3/5

5. Interviewee's Roles and Primary Functions

The interviewees were identified through research of internal and external materials on these coalitions—notably, webpages indicating coalition leadership positions and staff and authors of testimonies, presentations, and reports. The author also solicited recommendations for subjects to interview from colleagues and contacts in governmental and nongovernmental organizations active in Sandy LTR. In addition, the author was once in a coordination position with an LTRG on Staten Island and thus had knowledge of other coalition leaders based on participation in citywide coalitions of LTRGs.

Interviewees primary held the role of “coordinators” or “facilitators.” They were selected because they were identified as “authorities” on their coalitions—people who had extensive “behind-the-scenes” roles that gave them in-depth organizational knowledge of

the coalition's formation and development, structure, membership, and governance. Some of these individuals also functioned as "figureheads" or "symbols of power," but they were not selected predominantly for those roles. As noted in Stout's evaluation of broad-based organizing, these interviewees could be classified as "organizers" ("professionals tasked with helping ordinary citizens learn the practices of organizing and accountability"), who worked with the "leaders" ("who have earned the right to represent an institution"), and brought together a "core team" ("a set of leaders having the authority to formulate proposals and develop strategies on behalf of the organization.")³²⁷

There were variations in the formality of the interviewees' roles. In one case, the interviewee had worked as a formally identified "Disaster Recovery Coordinator," funded with a full salary by a community-based nonprofit that was a member of the coalition and tasked with coordinating the coalition. Her supervisor was one of the coalition's primary figureheads and symbols of power, in addition to one of the designated organizational "leaders." A second interviewee had a formal "Organizer" role for the coalition that was full-time for a period, which was a position she had for other issue areas in the community-based organization that employed her. Her supervisor was also the symbolic head of the coalition for some time ("Lead") and the leader representing a member organization. A third interviewee held one of two informal "Facilitator" roles. Both individuals were full-time employees of VOAD member organizations that were active in the community's recovery, and were allowed to use their roles part-time to facilitate these coalitions. A fourth interviewee was a volunteer from a neighboring community who became involved in recovery efforts and felt very strongly about dedicating time to "alleviate the suffering of her neighbors." She had the time and resources to help coordinate the coalition and was informally and organically placed in that position because of skills and strengths identified by colleagues in the coalition. The last interviewee was the pre-existing organizer of a clergy council that converted the council's focus for some time to Sandy-specific needs, and who was able to support this work through a seminary.

³²⁷ Stout, *Blessed Are the Organized*.

Most of these individuals continued to balance the recovery services of their specific organizations with the coordination role they had taken on in their LTRG. In some cases, they also continued to manage non-recovery services that they had coordinated prior to the storm. When asked about their primary functions, all interviewees described a wide array of tasks—with several indicating the overwhelming and constantly evolving nature of the role. Examples of tasks include: reporting out to a Board of Directors; providing guidance to and connecting various LTRG sub-committees; recruiting new members; managing relationships with members through one-on-ones; liaising with citywide authorities and participating in their respective forums; managing resource directories, websites, social media, and mailing lists; designing mechanisms for coordination and accountability, such as service delivery guides, databases, and intake forms; organizing “quick win” projects and events; supporting fundraising and grant proposals; leading canvassing efforts and related assessments; and, in some cases, meeting with impacted families with especially complex needs to help galvanize the coalition to find solutions.

All five of the interviewees had a role in helping found the coalition. Four founded the original, primary LTRG for their impacted community, while one founded an LTRG that arrived later in recovery to replace the original LTRG which was identified as ineffective. In several cases, the coordinators role evolved significantly. As one interviewee expressed, “I thought I would be more of a support staff, or taskmaster, for the primary lead, but I ended up being involved in deep relationship building and advocacy work.” Another interviewee mentioned that in the first month after the storm, she was mostly responsible for setting the time and space to discuss recovery issues, along with identifying the right people to bring to the table. A year into the coalition’s development she was “overseeing all of the various governance structures—the [coalition’s] general meetings, board meeting, steering committee, subcommittees, and bringing back reports from all of those bodies.” At some point around the third anniversary of Sandy, a significant portion of the Coordinator role for that coalition included advocacy efforts like testifying at city council hearings, speaking with local elected officials, and making policy recommendations to BIB. These roles continued to evolve, especially as the coalition

turned its attention to ongoing and emergent issues presented by the wicked problems that will be used to organize the work of LTRGs in NYC.

This chapter outlined the impacts of Sandy on NYC—including the differences by borough, the impacts of the storm surge and poor evacuation, and the costs associated with its damages and LTR. The major agencies and coalitions that served in each of the three main sectors of LTR practitioners was also outlined in detail to lay a foundation for the qualitative analysis in Chapter 5. In addition, the five LTRGs—the major community-led LTR model of NYC in the wake of Sandy—that were selected for this study were introduced. The introduction included a comparison of how the coalitions originated, which generally combined pre-disaster community organizing structures with the LTRG model as introduced by VOAD and FEMA. In addition, the LTRGs missions and primary functions were laid out, with the top ten missions identified across a majority of LTRGs represented by interviewees. In addition, this introduction to the case study sketched the roles and functions of the interviewees in the coalitions. They were all in leadership positions, primarily coordinating roles that gave them access to the behind-the-scene functions of the LTRGs they served. Building from this introduction to the landscape, coalitions, and interviewees, the next chapter offers an in-depth qualitative analysis of the interviews and related materials, organized by the five wicked problems.

V. “BUILD SOMETHING OUT OF THE BRICKS THROWN AT YOU”: ANALYSIS OF HURRICANE SANDY LONG-TERM RECOVERY GROUPS IN NEW YORK CITY

This chapter will explore how community-led LTR coalitions in NYC approached the five wicked problems outlined in Chapter 2: union of large-scale disaster and every day emergency; dwindling attention, energy, and resources after the spotlight fades; impossible choices of building back, building stronger, and abandoning; existence of too many leaders and not enough leadership; and the costs of slow burning crises. To do so, qualitative research focused on five community-led LTR coalitions in NYC. Research combined (1) assessments of these coalitions by scholars, media, and government institutions, (2) publicly available materials created by these coalitions, such as self-published reports, testimonies, presentations, and brochures on their websites and on the sites of related governmental and nongovernmental players, (3) findings from five 90-minute interviews with coordinators representing the major community-led LTR coalitions in NYC, and (4) materials shared by interviewees as follow-up (grant proposals, documents with organizational structures, earlier mission/vision statements, agendas, etc.).

As outlined in the Research Design section of Chapter 1, interviewees are anonymous to preserve the honesty and integrity of responses. Direct quotes from interviews are thus included in this chapter without a citation. Every quote from an interview includes a reference to an “interviewee.” The analysis also clearly denotes contributions from one or more of the five individuals who participated in 90-minute, in-depth interviews. These five individuals were selected for their leadership role in one of the following LTRGs in NYC: Brooklyn Long-Term Recovery Group, Bronx Long-Term Recovery Group, Lower East Side Ready! Long-Term Recovery Group, Queens Recovery Coalition, and the Staten Island Interfaith and Community Long-Term Recovery Organization

A. UNION OF LARGE-SCALE DISASTER AND EVERY-DAY EMERGENCY

At the peak of Sandy's flood surge on October 29, Glenda Moore attempted to flee the flood zone on Staten Island in a car with her two sons, two-year-old Brandon and four-year-old Conor. Her vehicle struck a hole, and she and her sons were forced to leave the vehicle. After clinging to a tree and her sons, she sought shelter in a nearby home. Ms. Moore claimed that the occupant refused entry into the home. Soon after, Glenda, Conor, and Brandon Moore were taken by the flood waters. Ms. Moore was separated from her children, and her sons did not survive. Their bodies were later recovered in a marsh. When interviewed by national media, the anonymous neighbor who refused entry claimed that someone was trying to break into his home. When Ms. Moore's account was shared, he "implied that the woman was at fault," saying: "It's unfortunate. She shouldn't have been out though. You know, it's one of those things."³²⁹

Although not stated in the mainstream media coverage of the deaths, online discourse, and accounts by interviewees, some theorize race as the cause.³³⁰ Moore and her two sons were black Staten Islanders living in a predominantly white neighborhood. Regardless of whether the neighbor's decision reflected racial bias, one interviewee used his response as an example of how a lack of social cohesion, pre-existing racial/ethnic/socioeconomic tensions, distrust between neighbors, or tendencies not to know people who live close to you can contribute to your post-disaster experience from "your first day to your last day of recovery." In addition, while the story does not come from the phase of LTR, it was identified as a narrative that was "debated" by leaders in LTR trying to process how inequities might inform chances of survival and recovery, and what they could do to prevent the continuation of those inequities into LTR.

³²⁹ Tim Hume, "Young Brothers, 'Denied Refuge,' Swept to Death by Sandy," CNN, November 4, 2012, <https://www.cnn.com/2012/11/02/world/americas/sandy-staten-island-brothers/index.html>.

³³⁰ Hume; Spencer Iovoli, "The Conundrum of Color-Blindness," (Im)possibilities: SUNY Geneseo English Department Student Blog, March 28, 2018, <https://morrison.sunygeneseoenglish.org/2018/03/28/the-conundrum-of-color-blindness/>.

This tragic story is an example of how recovery leaders wrangled with the role of pre-disaster gaps and inequities in attempting to deliver holistic recovery to Sandy-impacted New Yorkers. In Chapter 2, one of the wicked problems drawn from recovery literature was the merging of large-scale disaster impacts and every-day emergencies often preceding the storm. The first category of questions to interviewees were derived from this wicked problem, which were as follows: *What were five major issues (social, economic, political, or other) present in your community before the disaster that impacted its long-term recovery? What were five major strengths? Please describe how your coalition approached these issues or leveraged these strengths, if applicable.* This section synthesizes the responses to those questions with supporting qualitative evidence from publicly accessible and privately shared materials.

1. Identifying Major Socioeconomic, Political, and Other Issues

All interviewees readily identified five socioeconomic, political, other major issues that impacted their community prior to the storm that also impacted LTR. Despite variations in their responses, common themes arose across all five LTRGs. Table 3 outlines the top five types of issues reported and an example of issues. The top five were determined by the number of LTRGs out of the total represented by interviewees who reported the type as one of their major socioeconomic, political, or other issues. Table 3 also includes the other types reported as major issues but not shared across LTRGs.

Table 3. Top Five Socioeconomic/Political/Other Issues and Inequities Reported by LTRGs in NYC

ISSUE TYPE	ISSUE REPORTED	NUMBER OF LTRGS REPORTING
Income / Wealth	Challenges for low-to-moderate income/asset-poor families Displacement as tipping point into foreclosure/homelessness Collective poverty in geographic and affinity-based clusters	5/5
Race	Racial segregation Multi-generational impacts of discriminatory policies Role of public housing and public benefits Targeted predatory mortgage lending Racial tensions in neighborhoods, between service providers	5/5
Housing Affordability / Access	Impact of the 2008 Recession and housing crisis in NYC Increase in foreclosure rates Gentrification and rising housing costs Struggles for homeowners versus renters Lack of affordable housing for temporarily displaced families	4/5
Political Representation / Corruption / Social Capital	Poor political representation Lack of organizing in community Corruption of local political bodies Lack of lateral and/or vertical social capital	3/5
Health / Mental Health / Substance Use	Impacts of pre-existing mental health issues on recovery Mental health issues caused by storm and/or recovery Expense and stress of concurrent health issues with recovery	3/5
ADDITIONAL SOCIOECONOMIC/POLITICAL/OTHER ISSUES REPORTED BY LTRGS (NYC)		
Immigration / Language	Issues with language access Issues with citizenship status	2/5
Geography	Physical and political isolation	2/5
Poor Urban Planning / Housing Quality	Poorly built/maintained housing Cheaper housing in flood zones Irresponsible building in flood zones	2/5
Age	Challenges for older adults, e.g. fixed income and mobility	1/5
Ability / Disability	Service barriers for persons with disability, access, and functional needs	1/5

a. *Income/Wealth*

Every interviewee referenced the role of poverty, income instability, lack of asset-wealth, and benefits-reliant income as creating pre-existing issues that impacted LTR. Several interviewees shared that their LTRG was designed to “catch people falling through the net of other services,” which often signified families with complex financial and legal issues. Several LTRGs had systems for triaging clients that included calculations around the family’s income and assets (serving mostly low-to-moderate income families with limited assets). Some funders, especially from VOAD member organizations, had litmus

tests for “sustainability” that indicated that they would not support cases that may, for example, soon lose the home for which they were requesting recovery dollars. Some LTRGs explicitly did not have this policy, as they saw themselves as the “last chance” for families; however, other LTRGs adopted the sustainability litmus tests.

One interviewee went into detail around the stresses of her clients who were already “barely making it” before the storm and were “towing the line” with homelessness for the first time in their lives. Another interviewee mentioned that it was especially difficult to help these clients navigate recovery when their financial circumstance “was co-morbid with another issue—like substance abuse or severe mental health needs or an expensive medical issue that resulted in excessive medical bills.” Interviewees also mentioned families with pre-existing financial issues that impacted their housing recovery. This included delays in mortgage payments or pre-existing issues with the home’s physical state that residents had not been able to afford to rectify.

Financially-struggling Sandy impacted communities also tended to appear in clusters—which meant that blocks of neighbors, or circles of local affinity groups (e.g. a tightknit religious group) experienced significant financial issues simultaneously. One resident shared that in her Sandy-impacted neighborhood of Canarsie, Brooklyn, “Nobody’s rich. Everybody’s just rubbing two nickels together to make a dime.”³³¹ An interviewee reported that this tendency sometimes exacerbated personal financial issues, even if it created solidarity. Individuals experiencing personal crises may have usually turned to neighbors and neighboring family for personal loans, a place to stay, or contributions like food. However, when all of one’s neighbors are experiencing crisis—drained of money and displaced themselves—it is less likely that one can gain support from their traditional networks. One interviewee described how Sandy impacted “tight” communities of low-income homeowners living at the outskirts of NYC in “self-sufficient villages”—such as enclaves of Indian Orthodox Christian families living near their Sandy-impacted church in New Dorp, Staten Island, or multi-generational residents of Gerritsen Beach, Brooklyn. These groups experienced personal and collective blows as their local

³³¹ Center for NYC Neighborhoods, “Rising Tides, Rising Costs.”

businesses, congregations, schools, and other places that employ/support them were closed down temporarily or permanently by the storm.

NYC's Action Plan for their HUD CDBG-DR allocation provides context because it outlines demographics in the city's Sandy Inundation Area, indicating that 22% of persons in the inundation zone were considered below or near the poverty line identified by the City for 2010.³³² Poverty was greater among renters, who experienced the stress of displacement and/or moving expenses, though they often did not bear the costs of recovering a home.³³³ Homeowners could see damage reports that far exceeded their flood insurance payouts (generally, a maximum of \$350,000): severely damaged properties of larger families approached one million dollars in total expenses for construction, replacement of contents, and temporary displacement, among other costs.³³⁴ The immensity of these costs for homeowners will be later explored in the section on qualitative analysis of LTRG approaches to the "Costs of Slow Burning Crises."

Although homeowners predominantly represented more median-income families, "flood-prone homeowners often earn significantly less than their counterparts elsewhere in the city."³³⁵ The 2013 Preliminary Flood Insurance Rate Map showed an average combined income of \$100,000, but incomes varied greatly based on neighborhood: homeowners in Sandy-impacted neighborhoods in Brooklyn, Queens, and the Bronx saw 28% to 35% less income than the citywide average.³³⁶ A report by a local housing organization claimed that homeowners in the Inundation Area were predominantly "civil servants, educators, social workers, transit operators, police, and firefighters."³³⁷ Interviewees corroborated this profile. One interviewee described her clients as "very hardworking people working

³³² Kehoe, "The City of New York Action Plan Incorporating Amendments 1-19 for Community Development Block Grant-Disaster Recovery Funds."

³³³ New York City Long Term Recovery Coalition, "Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8"; Center for NYC Neighborhoods, "Rising Tides, Rising Costs."

³³⁴ New York City Long Term Recovery Coalition, "Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8."

³³⁵ Center for NYC Neighborhoods, "Rising Tides, Rising Costs."

³³⁶ Center for NYC Neighborhoods, 10.

³³⁷ Center for NYC Neighborhoods, 11.

multiple jobs—nurses, physician assistants, airport employees, maids, etc.” As the report stated, these impacted homeowners plunging into greater financial and personal crises in the wake of Sandy often represented “the people who make New York City run.”³³⁸

b. Race

All five interviewees reported inequities based on race, mostly addressing historical and systemic racism that impacts housing, income, political representation, and access. Examples reported by interviewees included: racial segregation; multi-generational impacts on income; role of public housing and public benefits; limited or unstable access to home ownership; targeted predatory mortgage lending; gentrification; racial tensions within neighborhoods; and racial issues overlapping with issues of immigration and language access. Most of the above issues reported by interviewees were identified as predominantly impacting New Yorkers of color—mostly of African, Caribbean, Latino, Indigenous, and Asian/Pacific Islander descent. To give context, the demographics of the Sandy Inundation Area in 2013 were similar to the city’s overall population at the time—representing a microcosm of the city’s diversity (and racial issues). 2013 reporting on the Sandy Inundation Area found that “approximately 45.5 percent are White non-Hispanic, 22.3 percent Black non-Hispanic, 20.6 percent Hispanic, and 9.4 percent Asian non-Hispanic and [...] slightly more than 1.5 percent are multi-racial non-Hispanic.”³³⁹

Interviewees reported that issues based on race often occurred where a diversity of impacted families lived in one geographic area, but in severe racial segregation. There are several historical and current reasons for that segregation. One historical example is redlining, which was the process in which federal housing agencies enacted discrimination against homeowners from the 1930s to 1970s.³⁴⁰ Neighborhoods received investment scores based on their “safety,” but these assessments labeled areas “with almost any

³³⁸ Center for NYC Neighborhoods, “Rising Tides, Rising Costs.”

³³⁹ Kehoe, “The City of New York Action Plan Incorporating Amendments 1-19 for Community Development Block Grant-Disaster Recovery Funds.”

³⁴⁰ Center for NYC Neighborhoods, “Rising Tides, Rising Costs.”

immigrant or African American presence” as unsafe and received low “grades.”³⁴¹ As a result, homeowners in these areas were unable to access home loans, which scholars attributed to a lessened ability to maintain the home and drops in land/property values.³⁴² Another more recent example contributing to segregation is gentrification in flood zones, which appears to be maintaining (and in some cases renewing) historical “separate, but not equal” segregation in housing, schools, businesses, and critical services.³⁴³

One interviewee went into detail about the disparities between two racially segregated communities on the same peninsula:

Our clients reported issues surrounding race in their community. It is stark because there is a predominantly “white” part of town and a predominantly “black” part of town. There were very different recoveries in the two places. The white end of town is predominantly single-family homes and condos, while the black end of town is working class homes, apartment buildings, and a lot of public housing. The white end of town is working middle-class to wealthy, and the black end of town is working middle-class to poor. Race, housing, and poverty were intertwined factors for the black community.

In addition to issues of segregation, the interviewer also touches on the interplay between race, housing, poverty, and other social issues. In interviews, issues of race cross nearly every other issue outlined by interviewees in Table 2. For example, one interviewee cited its role in the housing affordability crisis, stating that her clients of Caribbean descent “had been specifically preyed upon by the predatory lending practices that preceded the banking crisis, mostly by banks that hired people who looked like them and talked like them and had their culture to sell them bad loans.”

Another interviewee acknowledged the role of race in conversations around how to determine resource distribution. She observed that “deeply ingrained racism made it more difficult for community cohesion to happen in some neighborhoods after the storm, with people fighting over who was ‘deserving’ of community resources.” These debates sometimes included questions around whether or not to serve immigrants who could not

³⁴¹ Center for NYC Neighborhoods.

³⁴² Center for NYC Neighborhoods.

³⁴³ Center for NYC Neighborhoods.

demonstrate citizenship status. As earlier mentioned with discourses following the deaths of Conor and Brandon Moore, community leaders in some LTRGs often had differing opinions around whether race played a role in recovery efforts, and whether member organizations were exhibiting racial bias in their efforts. In that sense, race was not only a source of tension and anger between neighbors in impacted zones, but also a divisive element for multiple organizations participating in one LTRG. Some organizations were willing to design their programs in a way that would acknowledge and address racial inequities, while other organizations expressed discomfort or disagreement with incorporating the issue into their work. As one interviewee described, this disconnect impeded consensus and collective action because “it was more difficult to identify the actions to achieve our goals because our conversation was around systemic inequities that are difficult to solve.” These organizations varied in the degree to which they explicitly addressed racial awareness in their service delivery.

*c. **Housing Affordability/Access***

Four of the interviewees described the role of the housing crisis in NYC in the wake of the “Great Recession” between 2007 and 2009. One interviewee that “the impacted community was already in the midst of a homeowner foreclosure crisis because of the bad loans that came to a head during the Recession.” Another interviewee corroborated this:

Recovery was compounded by homeowners experiencing the housing crisis. They had been encouraged to take mortgages with balloon payments, with lenders instructing them to rent out parts of their property. Imagine you made an illegal apartment in your basement that you didn’t know was illegal. You were told by the loan seller: put up sheetrock in this basement to make the income you need to afford this house. Then you were sold a mortgage with a balloon payment. And wham! That payment comes due at the same time you’re displaced from your home from Sandy—paying rent for your family without rental income from the destroyed basement.

The interviewees’ responses reveal conditions that contributed to foreclosure rate increases during LTR. People who barely afforded their mortgages, or were behind on payments, experienced financial strains from the storm as tipping points towards foreclosure. As outlined in Figure 9, foreclosures in Sandy zones have been well documented. Prior to Sandy, “1,800 1 to 4 family homeowners in the storm surge area had started foreclosure

proceedings” and “by 2013, 4,228 area households had ‘underwater mortgages,’ meaning they owe more on their homes than they are worth.”³⁴⁴

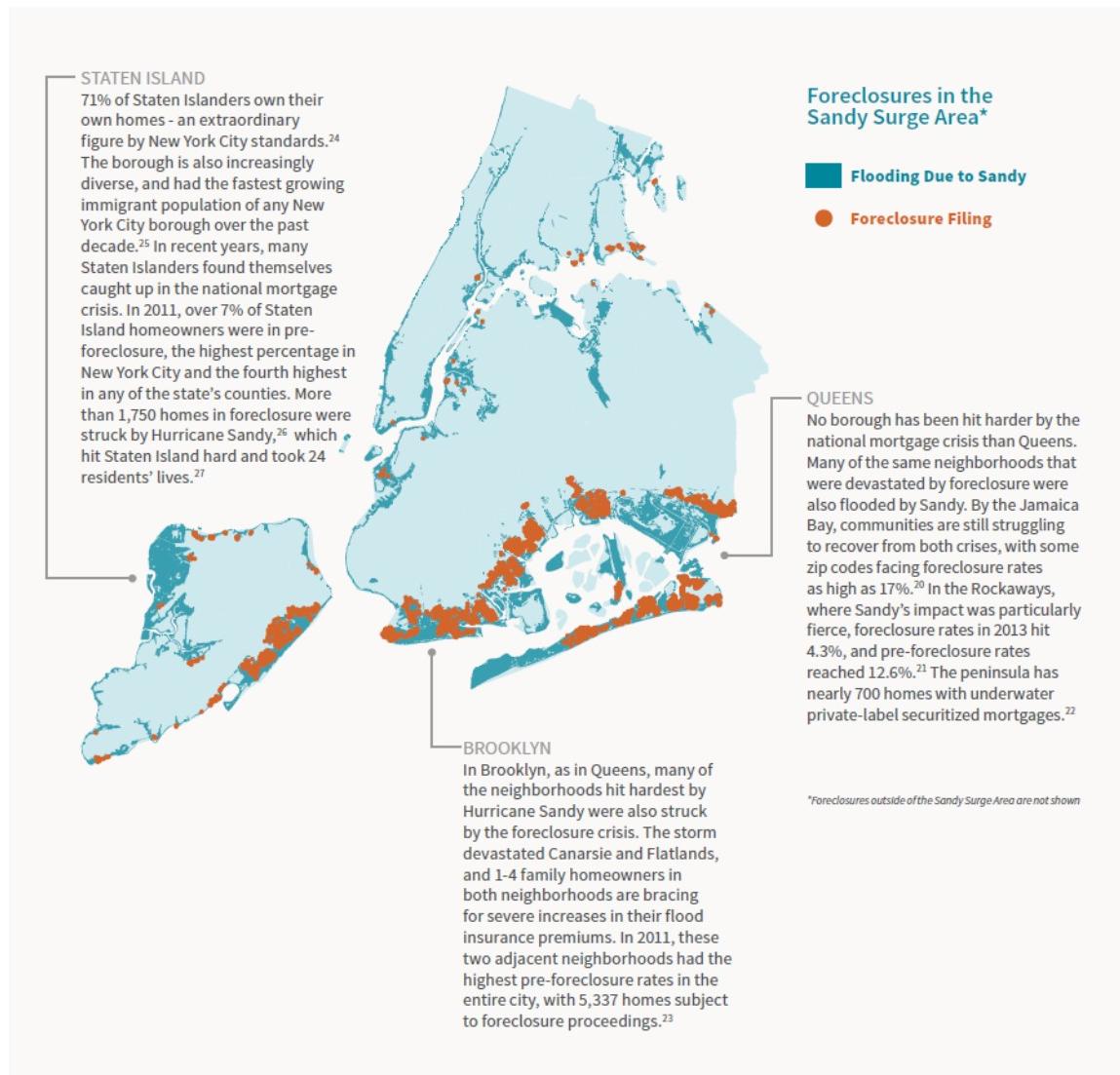


Figure 9. Foreclosures in Sandy Surge Area. Source: Center for NYC Neighborhoods (2014).³⁴⁵

³⁴⁴ Center for NYC Neighborhoods.

³⁴⁵ Center for NYC Neighborhoods.

While this impact on homeowners was immense, renters comprised a greater population of the flood zone area. Over 34% of the 115,195 housing units in NYC's Sandy Inundation Area were "owner-occupied"—the rest were "renter-occupied," with 10.2% of those renters reporting a "cost burden between 30.0 and 34.9 percent of their household income" and another 37.4% claiming a burden that is "35.0 percent of their household income."³⁴⁶ Although some benefits were offered to renters—such as housing vouchers—several advocacy reports by LTRGs indicated that there were less resources, attention, and policies focused on the needs of Sandy-impacted renters.³⁴⁷ These testimonies and reports claim that renters were often permanently displaced from their original rentals. In some cases, permanent displacement for renters at the very lowest income brackets meant homelessness and entry into shelters. Anecdotes in one testimony to City Council capture this phenomenon, alongside interviewees' responses.³⁴⁸

Overall, lessened access to affordable housing in NYC put a strain on homeowners and renters prior to the storm, but also unduly impacted persons displaced by Sandy in both categories. One interviewee claimed that "without a doubt, the number one inequity in NYC is lack of affordable housing, which normally drives a lot of poverty, so it is no surprise that it didn't mix well with Sandy recovery." LTRG testimonies contain a diversity of examples of both homeowners and renters experiencing the wrath of NYC's complex housing affordability issues. For example, some impacted families were eligible for vouchers they could not use because (1) they could not find rentals in NYC that met the voucher cost caps, (2) there was not enough available housing stock in their area due to an influx of displaced persons in rentals, (3) limited rental options often meant a lack of accommodations for large families and persons with disabilities or special needs, and (4) the uncertain nature of the amount of time in the rental made landlords refuse the vouchers for fear of renting for too short or too long a period.³⁴⁹

³⁴⁶ Center for NYC Neighborhoods.

³⁴⁷ New York City Long Term Recovery Coalition, "Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8."

³⁴⁸ New York City Long Term Recovery Coalition.

³⁴⁹ New York City Long Term Recovery Coalition.

Gentrification was also cited by three out of five interviewees as having undue burdens on housing affordability. One interviewee identified gentrification in her neighborhood as the primary pre-existing struggle that informed their recovery organizing: “The main issue we were facing before Sandy was ever encroaching displacement from gentrification. In our neighborhood, average median income varies greatly depending on what avenue you live on. On Avenue D, the average is around \$16,000. On Avenue B, it’s over \$90,000. Housing costs follow the same trends. Gentrification made affordable housing more and more scarce throughout long-term recovery. Sandy and gentrification contributed to forcing out recovering families who wanted to stay in their home community but could no longer afford it.” Another interviewee mentioned the two worlds that she witnessed while serving the impacted community. She described visiting neighborhoods that look like ghost towns, but then walking a few blocks down to a popular beach location and witnessing “tourists and gentrifiers” who seemed unaware of the pre- and post-Sandy struggles in their reach: “People go the beach out there, without necessarily learning about or caring about the people who live there.”

Another significant category of housing access and affordability during Sandy comprises persons living in low-income and public housing. As earlier noted, Sandy affected 26 public housing developments, containing 45,000 residents. These recovery efforts came with a unique set of issues that added an additional layer of involvement by a new set of city, state, and federal agencies. One interviewee noted that advocacy work for individuals in public housing was one of the main early advocacy efforts of her LTRG. Issues included long delays and neglect in public housings’ ability to recover from Sandy—issues that are still continuing to be reported as of November 2019.³⁵⁰

d. Political Representation/Corruption/Social Capital

Three out of five interviewees cited issues that related to the relationship between the community and their local political bodies—notably their elected officials, community

³⁵⁰ Claudia Irizarry Aponte and Greg Smith, “NYCHA’s Post-Sandy Rebuild Mired in Delays and Dubious Contracts,” *The City*, October 29, 2019, <https://thecity.nyc/2019/10/nycha-post-superstorm-sandy-public-housing-recovery-delayed.html>.

boards, civic associations, government agencies, and unaffiliated, but politically influential, local leaders. One interviewee noted that the main community they were trying to serve did not have strong “community organizing” structures or background, and also did not have as many advocates and political representatives supporting them. She cited Daniel Aldrich’s work on social capital during her interview, saying that the community she served lacked “vertical ties” with bodies of power and authority. She also cited that many of her clients and colleagues from the area were distrustful of elected officials and government institutions, sometimes over several generations, which made it difficult for the LTRG to form and maintain ties during recovery.

Another interviewee cited tensions arising from predominantly conservative political leaders who represented her community. Because of their denials of climate change, she claimed that it was sometimes hard to convince them to invest in mitigation efforts. That political leadership, and members of the coalition who identified with them, were cited to have been sometimes more resistant to social services. That made them less likely to consider or support the services that were trying to balance every-day emergencies with disaster impacts. As the interviewee stated: “In an environment where you're relying on critical social services to rise up and serve people after a disaster, if before the storm you weren't valuing or funding those services, that is problematic for your survivors.” Other interviews cited cases of political corruption—where local political bodies or political leaders embezzled recovery funds, leveraged cronyism in selecting recipients for recovery grants, or withheld critical information or resources from member organizations.

e. Health/Mental Health/Substance Use

Three interviewees identified health, mental health, and substance use problems as an issue that incurred rising costs and impeded decision making for families. One interviewee cited struggles to serve individuals who suffered from hoarding disorder—with one case remaining in a damaged home for several years for fear that her water-logged items would be removed. She also mentioned the role of substance abuse in contributing to heads of households missing important deadlines for recovery benefits and family members stealing recovery funds from family to support their use. She also mentioned the

role of trauma in children and adults—such as Post Traumatic Stress Disorder from before or after Sandy—and the rises in anxiety, depression, and suicidal tendencies that mental health member organizations recorded in clients. Expensive and ongoing health issues were also cited as a major indicator—with the interviewee citing the example of the financial and mental tolls of caregiving for a dementia or cancer patient for the entirety of LTR, while also navigating the recovery for both giver and recipients of care.

f. Other

At least two out of the five interviewees reported several other major issues. Isolated geography was one issue that contributed to neglect in services pre- and post-storm. Two interviewees spoke of the logistical difficulties and psychological isolation that accompanied the geographic location of their community. One of those interviewees served on an isolated peninsula where it was hard to deliver services even though it only had “one major hospital and very few on-site social services” because of poor transit, among other barriers. Another issue was poor urban planning and housing quality in risky locations in flood zones. Two interviewees who had studied the history of development in the community they served shared stories about the creation of cheaper housing in flood zones:

People building housing in these flood zones began to take “shortcuts” on how they did foundations and framing. Our organizations that support reconstruction efforts can see those issues when we go in to do repairs. Changing building codes and zoning allowed for those poor building practices during certain periods in NYC history. They were able to build less safe, less sturdy, multi-family buildings in high-risk flood zones (with flood insurance not yet compensatory to risk). These practices created rapid density in buildings and in areas that aren't safe to live in.

A second interviewee added, stating that “residential housing is just one example of irresponsible building practices. Look how many public housing buildings, hospitals, nursing homes, and facilities to serve persons with disabilities are in flood zones in NYC.” As earlier noted, six acute-care hospitals, one psychiatric hospital, 22 nursing homes, and 18 adult care facilities were in the surge zone.³⁵¹ Another issue identified by two interviews

³⁵¹ Gibb and Holloway, “Hurricane Sandy After Action Report and Recommendations to Mayor Michael R. Bloomberg.”

was access to services for immigrants. One interviewee mentioned issues in early LTR in which some government and nongovernmental recovery programs would mostly offer materials in English. He claimed that some clients missed out on opportunities to access services because they couldn't understand their eligibility. Programs later adjusted to this. Another interviewee mentioned citizenship status as a barrier for many of the clients that she worked with: "With status in question, it's already difficult to make a living, but then you are also not eligible for government support." While immigrants without documented status were eligible for some governmental and nongovernmental recovery support, the interviewee indicated how fears prevented families from seeking services.

Finally, some issues were only reported by one interviewee. One interviewee shared issues that accompanied the population of older adults in the Inundation Area. She expressed the undue burden on retired older adults living on fixed incomes from pensions and social security with spare liquidity—which had special relevance for Sandy recovery because residents of the Inundation Area "skewed older than the city as a whole."³⁵² This also overlapped with issues relating to mobility and access, which one interviewee covered along with other challenges in achieving LTR for persons with disability, access, or functions needs. She mentioned that disability advocates took part in the LTRG and pointed out several moments when services being offered were not accessible. One early example was the city's canvassing efforts for unmet needs, which were "initiated far too late – more than a week after the storm" and were "not sustained for the duration of time essential services were unavailable."³⁵³ Reports by community-based organizations in NYC corroborated this claim and outlined their role in filling the gaps, especially for persons with disabilities, access, and functional needs from immediate to long-term recovery. In fact, NYC was later sued by organizations that serve the disability community, and the city was deemed non-compliant with the Americans with Disabilities Act in its post-Sandy

³⁵² Center for NYC Neighborhoods, "Rising Tides, Rising Costs," 12.

³⁵³ de Blasio, "Supporting Community-Based Disaster Response: Lessons Learned from Hurricane Sandy," 3.

canvassing efforts.³⁵⁴ In the suit, one plaintiff states that, “[T]he City has not actually engaged the disability community in a way that the community views as legitimate, meaningful, or in a way that uses their input and expertise.”³⁵⁵ Advocates who had come together to address these inequities in early recovery continued to work with LTRGs and community-based providers around LTR-specific needs.

2. Identifying Major Community Strengths

Interviewees were also asked to identify five pre-existing strengths in their community. The question yielded fewer results than the challenge to list issues, and most respondent listed less than five. Their responses, however, resulted in somewhat similar results. First, all five respondents referenced how the community’s responses to every-day emergencies, or to past crises, informed their ability to navigate Sandy LTR. Some claimed this “resilience” as something collectively learned by their community during past crises like the recession. One interviewee expressed gratitude that his community had experienced bringing people together, and learning how to work collectively to identify, gather, and advocate with one voice. He attributed this to the wide array of issues faced by the community he served, which had given them “practice” in fighting together around everything from housing insecurity to neighborhood health issues. Another interviewee attributed much of the success of her LTRG to the tradition of grassroots organizing that had been occurring in her community for decades around gentrification, community gardens, and education. When asked about her community’s strengths she responded: “We have vocal, active, aggressive, badass organizing in the neighborhood that goes way back.” Two interviewees cited interfaith organizing that brought clergy together across religions to represent a diversity of communities—which created the foundations for their LTRG.

³⁵⁴ Brooklyn Center for Independence of the Disabled, a Nonprofit Organization, Center for Independence of the Disabled, New York, a Nonprofit Organization, Gregory D. Bell, and Tania Morales, v. Michael R. Bloomberg, in His Official Capacity as Mayor of the City of New York, and the City of New York (11 Civ. 6690 (JMF) November 7, 2013).

³⁵⁵ Brooklyn Center for Independence of the Disabled, a Nonprofit Organization, Center for Independence of the Disabled, New York, a Nonprofit Organization, Gregory D. Bell, and Tania Morales, v. Michael R. Bloomberg, in His Official Capacity as Mayor of the City of New York, and the City of New York at 12.

Others described a more personal resilience that was based on their individual survival of past crises:

A lot of the local leaders I worked with were survivors their whole lives. One of the organizers grew up in foster care, had several children, lost everything in Sandy, but had the will to serve her community and show up for others. There was a personal resilience that was her strength. It is the most unfortunate way to build that resilience—which is through complex and lifelong trauma from poverty, racism, housing insecurity, incarceration, etc. Local leaders like her were often dismissed and distrusted by the disaster “professionals” who saw them as “going rogue” just because they were getting stuff done and getting resources to people in astounding ways.

The interviewee suggested that strength derived from firsthand understanding of struggles can also create a more powerful, action-oriented compassion. Another interviewee described the strength of having figures with personal care and energy for their community, or neighboring communities, that they are willing to volunteer to participate in—and in some cases coordinate—LTRGs. Another interviewee described the presence of a “helping” culture, observing a “good heartedness of the people who live here to help their neighbors and all the stories of people heroically bringing neighbors into their homes and setting up relief tents and charging stations and tool swaps.” She attributed a part of this strength to communities having a strong social cohesion—where families lived for generations in the “bungalows” of one neighborhood or shared a common culture as recent immigrants in a neighboring radius of blocks.

Another suggestion that was offered as a strength was that the isolation of some communities that may have created barriers to receiving resources could also help to bring organizations closer together. One interviewee described how geographic and cultural isolation from the rest of the city gave her community a “small town feel” that sometimes worked to its benefit. It contributed to a unified identity, a sense of togetherness, and a collective understanding of the community’s history. It was also clearer to coalition coordinators what organizations would be at the helm of LTRGs because the social services landscape contained a handful of players who were well known to the organizers.

3. How Long-Term Recovery Groups in NYC Tried to Serve “the Whole Survivor”

One tactic used by LTRGs in NYC to address this union of inequities and disaster impacts was to make this abstraction clear through powerful anecdotes about real, impacted households. These anecdotes were sometimes used as prompts for discussion among coalition members, or as examples to illustrate trends that arose in quantitative data from collection methods such as canvassing efforts. They were often coupled with policy recommendations for the LTRG or for external sources like government programs to address program designs and policies that may have been exacerbating the problem. Glenda Moore and her two children represent one of the rare non-anonymized anecdotes in the interviews and materials gathered in this qualitative analysis that prompted discussion and advocacy. Interviews and related materials predominantly communicated the wicked problem of disaster impacts meeting every-day inequities and challenges through anonymous profiles of families struggling to see progress in their LTR. There is an impressive depth and breadth to these anecdotes, especially in testimonies.³⁵⁶

Three of those anonymous narratives appeared in the introduction of this chapter, which compiled real stories at the third year of Sandy recovery. The first anecdote from Brooklyn described a single mother who fell behind on mortgage payments while concurrently paying for rent for her displaced family, facing possible foreclosure and disqualification from the BIB housing recovery program. The second described a retired couple from Queens residing in the “livable” part of their damaged home, whose fixed income, cancer payments, and limited English proficiency contributed to their decision to turn down a home elevation. The third narrative of an older adult and her adult son on Staten Island with a disability found in a damaged home and were using YMCA showers due to contractor fraud, was exacerbated by the mother’s acute mental health issue. All

³⁵⁶ New York City Long Term Recovery Coalition, “Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8”; Staten Island Interfaith and Community Long Term Recovery Organization, “Testimony of the Staten Island Interfaith and Community Long Term Recovery Organization Before the New York City Council Committee on Recovery and Resiliency.”

three were used in testimonies and letters from legal and advocacy organizations for government-managed programs, accompanied by policy recommendations.

All three anecdotes contributed to changes in policies that alleviated stress and prevented poor decision making among homeowners like the cases. BIB later eased its restrictions on homeowners facing possible foreclosure and worked more closely with legal services groups to figure out how to prevent situations like the Brooklyn case from experiencing foreclosure and disqualification. The program also later changed its policy for covering the costs of temporary displacement during major repairs and home elevations—contracting out to a housing nonprofit so that cases like the one in Queens could make better long-term decisions about their home. And examples like the Staten Island story—which was exacerbated by FEMA threatening to recoup funds that were misused by contractor fraud—initiated conversations between legal/advocacy organizations and FEMA around how to handle recoupments when the recipient was not at fault for misuse.

The use of these anecdotes not only demonstrates how LTRGs highlighted inequities to bolster and unify their advocacy efforts; they also show how LTRGs used their coordination powers and diverse representation to meet the complex needs of families facing these inequities. For example, one important feature of LTRGs in addressing this wicked problem in NYC was that they were usually led by community-based providers. These providers were nonprofits, congregations, associations, businesses, and other entities that offered human services throughout the disaster cycle to communities based on local geography and/or affinity group. Because they were rooted in the community they served—and may have been affected by the disaster themselves—they often developed deep trust and long-term relationships with the disaster-affected populations that allowed them to understand the complexities of the community’s needs. These entities are mostly classified as “emergent” under the definition offered by Quarantelli and Stallings.³⁵⁷

Several interviewees cited the significance of emergent community-based leaders in being able to recognize, plan for, and respond to the balance of Sandy impacts and pre-

³⁵⁷ Stallings and Quarantelli, “Emergent Citizen Groups and Emergency Management.”

existing inequities and challenges. One interviewee spoke at length on this issue, describing the need for LTR professionals to be able to serve the “whole” of the recovery household, including their pre-existing needs:

To be able to actually serve a community in recovery, you have to look within the context of its socio-economic outcomes, the geology of the neighborhood, and the history of its development. You have to ask questions like: what did the planning tsars like Robert Moses do to this neighborhood in the 1960s? It requires a holistic, long-term view that is often not part of the “official” long-term recovery landscape of professionals. That is why it is necessary to have social service agencies and nonprofits who are experienced in working in impacted communities. We had organizations who could fill in those blanks that emergency management often failed to fill. And so when you have models that are claiming to offer “one way of doing it,” it’s hard to make it apply when you know all these incidents are deeply circumstantial and require years or decades of understanding and continuous questioning.

LTRGs attempted to do this by bringing together a diverse array of providers offering complementary disaster and social services. All the LTRGs had connected with the DCM Program, which assigned case managers to each recovery case. DCMs were expected to also see the “whole” that the interviewee described. These advocates for survivors were able to navigate the various services offered by their local LTRG to help create individual recovery plans that incorporated each service. Another interviewee agreed about the importance of balancing every-day emergencies and disasters in the planning and participation of LTRGs: “We were able to acknowledge inequities. We made it a part of the conversation because many of us are social service providers who are always thinking about those things. We were already positioned in a way that helped us see that the people not recovering from the storm were the people who were suffering from all of these other things that we were trying to address with our social service programs before the storm.”

There are several specific examples of this merger of services and approaches. Members of one LTRG board had been working on the foreclosure crises in their community for years and were able to weave that history—and how it created specific legal and financial challenges for homeowners—into the recovery planning done by the organization. Other LTRGs intentionally incorporated organizations that focused on financial counseling, legal aid, health and mental health services, and client advocacy into

their LTRG committees or leadership to bring in providers with in-depth knowledge of the issues identified above. Interviewees claimed that they were able to streamline recovery for especially complex cases when government programs could not because they were working together to address collective and individual issues as a whole. For example, the Brooklyn case of the single mother facing foreclosure was helped by LTRGs who placed her with a DCM in a member social services organization, connected her with a member legal services organization, and helped her secure temporary relocation funds and guidance for her potential foreclosure. In the Rockaway case of retirees turning down a home elevation, an informational event hosted by an LTRG connected them with a DCM and provided the flood insurance information that they needed to make an informed decision. For the Staten Island case, the family benefited from the ability of the LTRG to coordinate a complex array of services across several organizations in the correct sequence. Through the LTRG, eight member organizations were involved in making this family “whole”—with some representing community-based emergency groups without EM experience, and some representing VOAD member organizations with expansive EM.

One other strategy taken by LTRGs was to also ensure that the coalition’s leaders and participants were representative of the community being served. For example, one interviewee stated that she felt it was important to have people from the community who were also people of color to be able to speak to the unique recovery needs that she felt were being experienced among Caribbean immigrants in Canarsie or Middle Eastern families in Sheepshead Bay: “Our members of color were working professionals—case managers or attorneys—and brought a lot of added knowledge, necessary context, and understanding to the issues at hand.” While having decision makers with firsthand or secondhand experience with the complex traumas of Sandy’s LTR had serious benefits, two interviewees also acknowledged how this degree of nuanced and sometimes personal understanding could also contribute to severe compassion fatigue. This representation in leadership as a tactic for battling the union of every-day emergencies and disaster impacts will be further explored in several other wicked problems but serves as a tactic used by LTRGs to also battle this wicked problem.

B. AFTER THE SPOTLIGHT: DWINDLING ATTENTION, ENERGY, AND RESOURCES

In designing the questions that related to the Issue-Attention Cycle, the author chose to ask predominantly about strengths and barriers in gaining and maintaining buy-in and sustained participation in the coalition in the *long term*. The questions asked of interviewees for this wicked problem were: *How did your coalition gain and maintain buy-in throughout LTR? How is your coalition structured (e.g., hierarchy, network, hybrid)? Did you leverage any existing structures and/or technological platforms to organize? If so, what structures and/or platforms were leveraged?* Although the interviews did not explicitly mention the Issue-Attention Cycle, all interviewees mentioned its patterns in some manner when discussing barriers to maintaining their coalitions over the long term, including: dwindling resources, lessened media attention, and falling participation numbers from member organizations. This body of inquiry ended up sketching attempts to counteract the dwindling interest and chaos of the landscape. At the root of the question was an unspoken challenge to each interviewee: How did you galvanize and keep leaders when fewer people cared about your cause and your resources were dwindling?

1. Ebb and Flow of Attention and Resources

Three main themes arose in the interviews that align with several of the stages of the Issue-Attention Cycle outlined by scholar Anthony Downs, notably: “alarmed discovery and euphoric enthusiasm,” “realizing the cost of significant progress,” “gradual decline of intense public interest,” and “the post-problem stage.”³⁵⁸ Three LTRGs formed within a period of relative euphoric enthusiasm—between two weeks and five months after the storm. They cited that this development occurred when Sandy was still a “hot topic” in the national and local news cycle, and was still a priority for elected officials and federal/state/local government agencies. This attention meant that the LTRGs had the most access to resources, the greatest organizational participation, and the largest platforms for advocacy and policy change. Of these three interviewees, one felt that the coalition struggled to identify its leadership and mission for the first year, and didn’t really formalize

³⁵⁸ Downs, “Up and Down with Ecology: The ‘Issue-Attention’ Cycle.”

its structure in this initial “golden” period in the wider landscape. Another interviewee stated that LTRG she founded did not take off until well into the second year of recovery (in her case, a different LTRG had formed immediately after the storm that became defunct due to an array of problems). Those that were able to take advantage of the attention, energy, and opportunities of the critical window of “alarmed discovery and euphoric enthusiasm” correlated their founding in this period as one of the factors in their success. Two of those three LTRGs still exist (as of January 2020), and one closed its operation but handed over several of its members and capabilities to a COAD in their community. Of the three, one of those coalitions no longer does recovery but has been able to sustain funding for their efforts throughout the EM cycle for seven years (LES Ready!).

At the height of their work—between three months and one year after Sandy—these LTRGs saw between 60 and 90 member organizations, with Boards of Directors or Leadership teams ranging from 10 to 12 participants. One interviewee reported that, after this period, “at least 20 to 40 people dropped out” each year. While it varied based on community, interviewee feedback suggests that years two and three were when coalition members, local leaders, and the public were going through the phases of “realizing the cost of significant progress” and seeing “gradual decline of intense public interest.” Several interviewees reported that efforts dropped significantly around year three, which required new techniques to keep the remaining members involved. After year three, some communities entered “the post-problem stage.” That does mean that there were not still many cases in recovery; rather, many local leaders and the public considered the problem to be in the past and were focusing on new issues. Year five after Sandy, for example, saw the whirlwind of the 2017 Hurricane Season and its impacts through Hurricanes Harvey, Irma, and Maria and years five to seven have seen complex wildfires in California. And that is only on the domestic front and within the news cycle of disaster response and recovery. Several other issues—such as the 2016 election—also impacted the ability for LTRGs in the post-problem stage to get their story into the news and garner resources.

Reports released by organizations active in Sandy LTR in NYC corroborated trends that interviewees reported. For example, a report published by NYDIS with support from NYC VOAD, surveyed 47 organizations across NYC that were carrying out “voluntary

housing recovery projects” and “volunteer management.”³⁵⁹ They asked organizations to self-report their progress and issues to date, which was cross-referenced with a survey carried out by NYC VOAD in 2014 that was retrospective of efforts from December 2012.³⁶⁰ They also asked organizations when they planned to close operations, which is how they collected “projected” number of organizations to remain engaged in 2016 to 2017. With these combined data sets, the report attempted to show the changes in organizational participation in LTRG from 2012 to 2017 for organizations leading voluntary housing recovery projects, and wider volunteer management projects (with over 72 percent of respondents cited as members of LTRGs). Figure 10 demonstrates the changes in the numbers of these organizations over time:



Figure 10. Number of Voluntary Organizations Engaged in Sandy LTR, 2012-2017. Source: NYDIS (2015).³⁶¹

The report appeared in the third year of recovery when several major contracts and funding cycles were projected to end by December 2015. As Figure 10 suggests,

³⁵⁹ New York Disaster Interfaith Services, “2015 Hurricane Sandy Voluntary Rebuild Environment.”

³⁶⁰ New York Disaster Interfaith Services.

³⁶¹ New York Disaster Interfaith Services.

organizational participation was expected to drop by half between June and December 2015. Although this author could not find reporting to capture the actual closure of programs, four out of five interviewees also indicated year three as a period when LTR was significantly impacted by the end of funding cycles and departure of programs. The trend aligns with the reporting of interviewees, who claimed that their LTRGs mostly saw major declines in funding after that time, with occasional spikes around Sandy anniversaries. The interviewee described this issue as one that is common to LTR across the country and could be avoided with better resource planning on behalf of major funders:

The ebb and flow of funding was an extremely disruptive part of recovery. Everyone was on time-limited recovery contracts, but in a disaster the size of Sandy, automatically you're going to be there at least five years. If you're going to do it right, you have to pay attention to the research that shows this type of thing going on for years on repeat. Yet, they are still funding contracts for one year to 18 months. You lose a lot of talent, energy, and collective knowledge critical to developing the field of disaster recovery.

An interviewee also expressed frustration at “antiquated funding systems that look at these things as short-term instead of planning for long-term recovery,” in reference to funding from VOAD. The NYDIS report also attempted to capture loss from dwindling projects and volunteer labor between 2012 and 2015, as shown in Figure 11.



Figure 11. Timeline of Voluntary Rebuild, NYC. Source: NYDIS (2015).³⁶²

As demonstrated, voluntary support lessened for voluntary rebuild organizations between the second and third year. One can interpret this data that shows less nongovernmental efforts given to LTR as representing lessened remaining need; however, the report framed these dwindling resources as concerning because of the projected numbers of remaining need. At that moment in Sandy LTR in 2015, 1,014 cases were still open across case management agencies.³⁶³ Also, BIB had served 6,597 applicants, with 1493 construction starts, 957 constructions completed, and 4147 reimbursement checks sent out; however, an estimated 13,607 of initial applicants were not yet served, with 520 individuals of those 13,607 applicants “still being considered for a pathway in BIB.”³⁶⁴ LTRGs at that time were not certain how many of those 13,607 cases still had recovery needs that were eligible for assistance by their member organizations and were also

³⁶² New York Disaster Interfaith Services.

³⁶³ New York Disaster Interfaith Services.

³⁶⁴ New York Disaster Interfaith Services.

uncertain whether the program would change its policy (as it had done several times) in a manner that would disqualify those remaining cases. At that time, LTRGs in the city were facing a black box regarding needs that could come out of BIB. Meanwhile, they were rapidly losing resources and organizations, concurrently unable to raise more funds or gain more attention for their causes because they could not project how many more cases they may need to serve.

The Issue-Attention Cycle can also be seen in the dearth of resources and analysis on Sandy in the long term. Issues in early recovery are fairly well documented in media, scholarship, and even by governmental EM. Most “official” materials on Hurricane Sandy that address “lessons learned”—notably the After-Action Reports by NYC and FEMA—include some issues that continued into LTR, but do not assess issues beyond early recovery. For the most part, they do not reflect the issues that are outlined in this chapter. This gap is a greater issue in LTR writ large (AARs are rarely created, for example, *after* LTR to assess recovery), but made it especially difficult in Sandy LTR in NYC to track progress and assess total need. This dearth of assessment of recovery issues also translated to a lack of ongoing assessment of needs. “Official” canvassing efforts tended to drop off by the second year of recovery. Through multiple testimonies, reports, and interviewees, advocates from several of these LTRGs bemoaned the early end to needs assessment and the lack of clear understanding of remaining needs at various junctures in the recovery. Their questions on how many families were still awaiting recovery—and the scope of their remaining unmet needs—remained unanswered through much of LTR.

2. How Long-Term Recovery Groups Weather Issue-Attention Cycle

As outlined below, four approaches for how to deal with the challenges of the Issue-Attention Cycle arose in analysis of the interviews and LTRG materials.

LTRGs should be formed as early as possible (ideally within the first six months to one year, if not before the incident) and set immediate structures to maximize the gathering of resources during more “favorable” phases of the Issue-Attention. As outlined in the Issue-Attention Cycle, early structures built during periods when resources and interest are

at their peaks can potentially survive the long haul.³⁶⁵ Multiple interviewees identified that the formation of a structured LTRG with initial resources and buy-in at the very start of LTR was critical in helping it survive the crueler phases of the Issue-Attention Cycle.

LTRGs should create mechanisms to assess unmet needs on an ongoing basis, even when the “official” sources of canvassing stop doing so. They will need this data to inform their planning and advocate to local elected officials, funders, and other authorities for continued support. In the case of Sandy LTR, data on unmet needs was not responsibly transferred to LTRGs, and even with their own canvassing efforts, they rarely fully identified unmet needs when they needed to demonstrate it to funders and figures of power. However, they were successful in some cases in pooling their respective canvassing efforts and queues of clients to advocate for the continuation of programs that faced the chopping block. For example, one interviewee stated that when the DCM Program was threatened to be closed down (it happened several times), but they knew there were still many open cases, the group came together to demonstrate unmet needs and lobby for more funding extensions for that organization.

LTRGs must leverage later windows of opportunity (such as anniversaries) or “trending” issues that relate to their work, in addition to “testing” the coalition during nontraditional emergencies. Interviewees cited taking initiative to contact media and other authorities to remind them that “Sandy was still a story” every October as the anniversary of the storm approached. This included highlighting issues on the Daily Show with Jon Stewart, submitting stories to local and national press, and advocating regularly at city council hearings to continue to remind them of the existence of recovery organizations.³⁶⁶ In one case, the sustaining of the coalition was attributed to the coalition being re-mobilized around another emergency—a destructive building explosion—which reenergized members and was “a perfect test for our ability to re-surge our work.” The interviewee explained that after the explosion, people realized: “This cause is very needed. This

³⁶⁵ Downs, “Up and Down with Ecology: The ‘Issue-Attention’ Cycle.”

³⁶⁶ Paul Brandeis Raushenbush, “Hey, New York! People Are Still Recovering from Superstorm Sandy,” *Huffington Post*, October 28, 2014; Klepper, “Hurricane Sandy Survivors’ Long Wait for Housing.”

coalition is very needed.” One interviewee claimed that while attendance dropped off significantly after the fourth year, the LTRG contained community-based members who continued to work on a number of non-disaster issues together that tested their coordination functions. As one interviewee stated: “Our groups are now fighting food injustice, housing issues, employment problems, and language barriers. So being resilient to a storm was the last thing on their minds, but they grow resilient from everything that they were going through, so we tried to always tie the recovery and preparedness to those other efforts.”

LTRGs must be intentional and strategic about sustaining early structures and maintaining member and community buy-in through the more difficult stages of the Issue-Attention Cycle. Several interviewees recommended formalizing and embedding LTR work into existing organizations: specifically, by having them fund staff positions dedicated to this work and leverage their existing channels for fundraising. As one interviewee noted: “In the beginning, it was mostly led by volunteers, then there was a little drop in participation, and then a transition to representatives being paid by their organizations or from wider Sandy funding to do Sandy work.” Other interviewees emphasized the need for a balance between structure and flexibility to sustain through LTR, recommending a hybrid of centralized and decentralized approaches. Still others emphasized the use of strategic processes for gaining and maintaining buy-in from individual members and the collective. The various recommendations in this approach made up the bulk of what interviewees cited, and will be expanded in the sections to follow.

a. *If You Build it, They Will Come (They May Even Stay)*

One central theme that arose in all five interviews was the significance of gaining and maintaining buy-in from organizations and community members. Interviewee findings on this theme were rich in tactics, which are outlined into seven primary types below

(1) Marketing the Coalition (and Coordination in General)

LTRGs faced two types of competition: (1) other LTR coalitions forming in their community managing their own members and funds, and (2) individual organizations wanting to “do their own thing” and form a personal network of favored partners to achieve coordination. One interviewee cited several issues that “occurred when there are too many

of these coalitions covering the same service area.” She shared the example of competition with a group run by the Governor’s Office where “a lot of the community members who might have participated in our LTRG, we’re also at multitudinous meetings for [the other group].” Three interviewees cited a need for people skilled at “marketing” the value of the LTRG and the message of coordination. This messaging often required understanding member needs and demonstrating how the LTRG could augment or fill those needs.

(2) Responding to “Show Me the Money” Mentalities

“Is your meeting worth my time and money?” One interviewee shared this question, which she imagined potential member organizations asking her. It sums up the need for LTRGs to show what benefits, notably access to funding, will be made available to members. This feat was challenging for LTRGs in NYC because, unlike LTRG models in other jurisdictions, most of these coalitions did not host their own Unmet Needs Committees or Roundtables where donors came to distribute funds to individual cases. In NYC, that role was filled by a citywide body managed by NYDIS, which meant funding was more centralized but also stripped leveraging powers from LTRGs. Representatives of the UNR took part in their coalition, but later some funders later decided to distribute money directly to LTRG members. Either way, demonstrating how member organizations would be able to better access funds and expedite their cases through the LTRG could be critical in gaining buy-in. One interviewee described how she “just started building the coalition,” promising people that resources would come if they built it:

I kept telling people: if you keep doing this, resources will come. If you keep working together, there will be better outcomes and more people will want to take part. It was the whole if you build it, they will come mentality. And sure enough, we were able to bring back some of the resources we’d lost and bring in new funding. Eventually, we created a model that was set up to support organizations looking to directly fund cases. It was attractive to agencies who wanted to work on a more community level.

This facilitator kept trying to “market” the idea, both among local stakeholders and among city and national partners with funding. Another coalition offered pass through grants to members with the funds they raised—which provided a small but helpful financial

incentive. In each of these examples, marketing the LTRG as a way to better distribute, attain, and track funds was attractive to a number of stakeholders.

(3) Listening and Listening (and More Listening)

Three interviewees referenced the necessity of listening on a continuous basis to member organizations to maintain situational awareness and gain trust. One interviewee described how, at first, she had to fully assess what was happening for some time and get many perspectives:

I was mostly listening and trying to get to know people and understand what was happening. It was hours and hours of time with people: one-on-one, following up, visiting, sitting, listening, in person, over the phone. I probably spent 12 hours a day listening to people in the beginning: listening and listening and then trying to figure out how to spin it back into why they should still stay involved in this. It gave me a good sense of what each person wanted, and how I could get them what they needed.

After all that one-on-one work, she invited anyone “interested in having the conversation about how we could coordinate ourselves better” to come to a meeting. She didn’t know what to expect, but fifty people showed up from different recovery organizations and “packed the house.” Several other coordinators expressed the necessity as a coordinator to meet one-on-one with representatives of member organizations, not only to maintain the relationship over the crueler stages of LTR, but also to “master” the complexities of the service landscape across providers at any time. This vantage point placed the interviewees in unique roles, as they were often the best positioned to piece together disparate services and information over time. This helped them better understand the problem and make recommendations and referrals.

(4) Building Transparent, Continuous Participation and Trust

Interviewees expressed the necessity of multiple platforms for participation from coalition leaders, very active member organizations, less active member organizations, and clients/community members. To achieve this approach, LTRGs often offered a general meeting for all members, steering committees or boards of directors for more active members, subcommittees focused on service areas, and public events and projects. Another interviewee described the necessity of creating an inclusive and warm environment: “A lot

of people came because they felt the love, the warmth, you know, whenever we had a meeting. I would sometimes cook breakfast from home. It was just very family-oriented.” One-on-ones also came into play in soliciting ideas and concerns from “quieter” voices.

As one interviewee described, “I would sit down and have lunch with them individually and ask: Where would you like this coalition to go? Where do you see yourself in that? Because some people don't always speak in a big meeting, I always made sure I told them: Your voice is very needed in this group. Without you, we could not be doing the work that we do.” Encouragement and options for engagement often maintained critical services. Achieving this result, however, could require “turning the bad into the good.” One participant described the difficulty in forming a coalition in the wake of a failed LTRG that had sowed much distrust, anger, and division. This interviewee formed an increasingly wider core group of “believers” in the chance for a better coalition experience. Eventually, they made something meaningful out of a seemingly hopeless situation. As she quipped: “We took the bricks that people threw at us and built something meaningful. Because people came with all their issues, so we had to spend time the first few weeks going through those issues and rebuilding trust and organizing people into action-oriented groups.”

(5) Snatching Quick (and Interesting) Wins

Quick wins—like early canvassing operations that brought multiple players together to identify unmet needs and new cases—were critical to success and buy-in. Four interviewees mentioned quick wins as especially important for their early organizing work. Other projects included creating a resource guide in English and Spanish, co-hosting a service provider fair, and doing a “rebuild day.” Some hosted creative events to better reach community members, such as Sandyween—a Halloween parade aiming to bring people out to support Sandy work and galvanize coalition members to come together. Others kept their work going by taking part in city planning projects, like the “East Coast Resiliency” project. Some LTRGs continued to remain active through quick wins in other efforts, such as responding to a building explosion, or supporting service centers in NYC for refugees from Hurricane Maria.

(6) Look for the Helpers, and the Organizers

According to the interviewees, if there are pre-existing organizations and coalitions doing successful organizing, they should be incorporated into the LTRG, and ideally their organizers should be made a part of the leadership team. Prior organizing had helped build trust in at least one community where “we were facing innumerable things which aligned a lot of the nonprofits together, never assuming that we were going to be fighting Mother Nature.” Organizers who had helped build trust already in their communities could much more easily call together groups of people around a concept like a LTRG: “We had worked together as organizations on so many prior issues. Our leader would call and say, ‘Hey, I'm having this meeting tomorrow about Sandy and I want you there,’ and people would show up because we had shown up for their organizations many times.” Organizers are key, but other interviewees cited the importance of helpers: “Some people just cared and wanted to be involved in the recovery, regardless of whether they were paid for it.” Although it is hard to maintain volunteers without seeing burnout or loss of interest, these “helpers” played critical roles not only at the beginning of LTR but also several years into recovery. At least one interviewee was a volunteer “helper” who continued to support the coalition.

b. *Building Coalition Structures for the Long Term*

Tactics offered by interviewees for gaining and maintaining buy-in echo other sensemaking efforts that evade traditional “approaches” to wicked problems. For example, they align with approaches outlined by Stout in his work on Hurricane Katrina mobilizing among faith-based communities, and in organizing literature for groups tackling a wide range of wicked problems and related issues. Often included in these analyses alongside “tactics” are “structures.” These are outlined in Table 4 as mechanisms built to organize and sustain efforts throughout more challenging phases of the Issue-Attention Cycle.

Table 4. Coalition Structures and Platforms of LTRGs in NYC

DEGREE OF CENTRALIZATION	NUMBER OF TOTAL LTRGS REPORTING
More of a network	2/5
Hybrid	2/5
More of a hierarchy	1/5
DEGREE OF FORMALIZATION	NUMBER OF TOTAL LTRGS REPORTING
Had General Assemblies / Open Forums	5/5
Had Service-Based Committees / Multi-Service Taskforces	4/5
Had Steering or Executive Committees / Leadership Teams	4/5
Had Boards of Directors	2/5
Wrote By-Laws	2/5
Registered a 501 (c)(3) for the LTRG	1/5
PRE-EXISTING STRUCTURES LEVERAGED	NUMBER OF TOTAL LTRGS REPORTING
Used LTRG Models	5/5
Used Community Organizing Models	3/5
TECHNOLOGICAL PLATFORMS LEVERAGED	NUMBER OF TOTAL LTRGS REPORTING
Used Social Media (e.g. Facebook, Twitter)	5/5
Made a Website for the LTRG	3/5
Used Email Listservs / Mailing List Services	3/5
Used Phone Apps (e.g. Zello Walkie-talkie App)	2/5

(1) Degree of Centralization

Most of the interviewees identified their LTRG as a hybrid of a hierarchy and a network. One interviewee said that the model skewed towards a hierarchy, with a Board of Directors, Steering Committee, Committee Chairs and other executive roles. They were elected to these positions. Two other interviewees indicated that the model they used was more of a network, “So it was more of a shared space. We all learned together and none of us were the only expert or leader.” In one of those cases, the founders intentionally dismantled an approach that came before them that was top-down, instituting a “shared leadership” model that distributed power among different committees. There was no formal executive director, coordinator, or leader. That is why this interviewee identified as a “Facilitator.” One of the latter interviewees described the evolution of the LTRG between these poles: “It started out as a hierarchy, and it ended up as more of a network.” In all of those cases, however, they outlined ways in which they leveraged both. One interviewee

described the balance as such: “We may have looked like a hierarchy on paper, but we survived on a strong, decentralized network.”

(2) Degree of Formalization

All interviewees reported a formalized structure that at least included a general meeting between members, which in some cases was open to the public. Four out of five interviewees identified the existence of service-specific committees, or multi-service taskforces as one of the primary elements of their structure. These committees were described by one interviewee as the “bread and butter” of their LTRGs. The committees offered ways for more organizations to take leadership through chair positions and focus on issues most relevant to their organization. One interviewee claimed that they mostly used committees to empower members, allowing people to discern their own committee topics and projects, but giving them basic community organizing principles, templates, and suggestions for how to keep people on task and identify projects. Another interviewee described the committees in her coalition as: “disaster case management, rebuild, funding, mental health, advocacy, and technology.” An example of those committees for an LTRG—the SI LTRO—is shown in Figure 12. The “Individual Assistance Committee” in Figure 12 represents one of the multi-service taskforces that brought together several types of services to support individual cases. Three interviewees mentioned this model as important mechanisms for bringing and keeping funders and service providers at the table.



Figure 12. Committees of a LTRG. Source: Staten Island Interfaith and Community Long-Term Recovery Organization (2014).³⁶⁷

Most interviewees indicated a leadership group, such as a “Steering Committee,” “Executive Committee,” or “Leadership Team” that helped organize LTRG efforts and set goals for the wider membership. In one model, the Coordinator would attend all Committee meetings as the connector between committees, but all committee chairs would meet in a steering committee. Some interviewees mentioned bringing this structure to the next level through the creation of a Board of Directors and By-Laws. Structurally, most of the LTRGs did not formalize into a 501(c)(3) to function as their own nonprofit, but rather worked under a fiduciary or host nonprofit that was an LTRG member. Only one organization, the

³⁶⁷ Staten Island Interfaith and Community Long Term Recovery Organization, “Grassroots Collaboration for Disaster Preparedness.”

SI LTRO, formed a 501(c)(3) and reported the benefits of that structure in battling the Issue-Attention cycle, such as the ability to more easily fundraise and maintain funds.

(3) Pre-existing Structures Leveraged

All five interviewees cited the use of the national LTR guide offered by VOAD and FEMA to develop their coalition. One referenced that the benefit of the model is that it was developed specifically for LTR—pre-organized into types of services common in recovery. As one interviewee described it, the LTRG development process is designed to “help you assess your top needs, teach about new concepts like DCM and the disaster cycle, and guide you as to what types of organizations or committees you should have within the group.” Guides like VOAD’s LTR Guide—and similar materials developed by organizations like Church World Service—reference balances of centralized and decentralized structures, formal, and flexible mechanisms for service delivery, and other approaches identified here as sensemaking tactics. One interviewee stated that they followed the LTR Guide form VOAD “fairly closely.” Another interviewee expressed the value of discussing the model with a FEMA VAL, which helped materials around LTRGs “come to life.” She cited the questions that the FEMA VAL asked in reference to LTRG development: “How do you want to meet? When should you meet? Who should be there? Who is missing?”

Others cited the LTRG Guide as somewhat helpful, but they had to be thoughtful around taking elements that seemed most relevant for their jurisdictions:

We followed a lot of [the LTR Guide], but Sandy hit a much more varied constellation of communities—by economic situation, by type of neighborhood—than what is designed for in the LTR Guide. What we did in NYC—with a multiplicity of languages spoken, navigating recovery for undocumented people—was in some ways unique. It seemed more complicated because as soon as you would unearth one thing, then there were other things you had to consider. So to apply the LTRG model to that, you really had to take what would work and leave the rest.

Creative uses of LTRG materials from FEMA and VOAD were referenced, but interviewees also cited the benefits of working with other LTRGs and adapting their models. At one point, all five interviewees were a part of forming a coalition of coalitions—a citywide Long-Term Recovery Coalition—in which they consistently shared best

practices and advocated together for resources and inclusion into recovery planning. Another interviewee completed research into the various manifestations for LTR models by reading everything she could find about how other people had set up these coalitions.

In addition to the LTRG model, three out of five interviewees mentioned using “organizing” models such as “grassroots organizing,” “community organizing,” and “broad-based organizing.” These interviewees were well versed in the techniques of organizing (as described in Chapter 3) from their professional, academic, or personal work with the concepts. One facilitator cited learning how to organize from a career in social work, while another had personal experience organizing in her community for over a decade. The interviewee described a few tactics that she attributed to community organizing against gentrification in her neighborhood, which were successful in the LTRG’s mobilizing: “People don’t want to sit down to hear someone speak to them for an hour. You’ve got to make it interactive. You’ve got to make people feel like they own part of this. You’ve got to break into groups and scribble ideas on butcher paper and elect someone to carry it out. You need to constantly show you are getting shit done.” Whether or not all of these principles can be attributed to community organizing, several interviewees cited the field as being helpful for the LTR landscape.

(4) Technological Platforms Leveraged

Much has been written on the burgeoning use of social media during Sandy—with one body of academia classifying the disaster as an example of “Disaster Relief 2.0.”³⁶⁸ LTRGs leveraged several technologies to carry out coordination and information sharing that were not available during major LTRs post-Hurricane Katrina. Thus, there was not much guidance in LTR materials, or among FEMA VALs or VOAD organizations, in 2012 around how LTRGs should best leverage these technologies. LTRGs in NYC offer some of the earliest domestic, expansive uses of these platforms for digital multi-stakeholder networks. That creativity came through in the responses from interviewees.

³⁶⁸ Harvard Humanitarian Initiative, *Disaster Relief 2.0: The Future of Information Sharing in Humanitarian Emergencies*; Kaniewski, “The Resilient Social Network @occupysandy #superstormsandy”; Rakesh Bharania, “Hurricane Sandy and Disaster Networks: Key Observations, Good Practices, and Challenges” (Lessons Learned Information Sharing, United States Department of Homeland Security/Federal Emergency Management Agency, n.d.), www.LLIS.gov.

Most interviewees used Facebook to create groups that organized around quick wins and projects, but also to regularly post to members and the public regarding events and developments in the wider recovery landscape. Interviewees described using Facebook and Twitter to highlight client stories and periodically remind their networks that Sandy recovery was happening but facing barriers. Although people were inundated with information on these platforms, interviewees stated that it was still a more efficient way to remind their networks of unmet needs than doing so in casual conversations, text chains, or email blasts. One interviewee became a “local recovery social media guru” who was known for scanning social media for related Sandy stories and compiling and dispersing that information on her profile. She became a critical source for other recovery workers, who might check her feed for updates to their ever-changing recovery landscape—which was often too niche and too rapid in its changes to show up in the morning news.

LTRGs also leveraged “trending new private platforms” such as crowdfunding sites like “Go Fund Me” to raise money, phone “apps” like Zello that helped them organize their communications, and listserv platforms like “MailChimp” to blast out information. One interviewee cited MailChimp as the primary way her LTRG stayed connected to Sandy-impacted families: “Every week, I was able to communicate with 600 impacted families through that service. I sent them critical information about the recovery landscape that we could gather among our wide membership and curate for people who were otherwise left in the dark about what was happening in their Sandy-impacted community outside their immediate vicinity.” The ability to connect and hear from clients over these platforms was aided by disaster “tech” experts who volunteered to take part in LTRG efforts. Many of these skilled volunteers came from the Occupy Sandy Network, helping LTRGs fund, design, and maintain website. These websites were often open source—meaning that LTRGs were connected to a wider open source movement that shared the ideals of transparency, organizing, and grassroots information sharing. Many of those websites still exist (even in archived form) and are open to the public, which means that researchers benefit from rich, first-hand recordings of LTR by practitioners on the ground through platforms initially designed for recovering families. These platforms thus played a role in battling the Issue-Attention Cycle, both during LTR and in the legacy that followed.

C. IMPOSSIBLE CHOICES: BUILD IT BACK, BUILD IT STRONGER, ABANDON IT

Interviewees answered a series of questions around common visions, goals, or points of consensus in their coalition and community around the future of their LTR. Questions were designed to better understand how the LTRGs, their members, and their clients navigated the difficult choices of building back, building stronger, or abandoning—as was explored in Chapter 2. The questions also sought to better understand how the coalition mediated—or failed to reach compromise—around conflicting visions of the recovery’s end state, metrics for progress, and other important planning processes in LTR. The questions were: *Was a common vision identified for the recovery of your community? Were goals/values/points of consensus agreed upon for your coalition? How diverse were stakeholders? Were there difficulties reaching consensus?*

1. Identifying a Common Vision for Community Recovery

NYC contains the largest number of urban residents in a high-risk floodplain in the US—over 400,000 people—which is “larger than the entire populations of Cleveland, New Orleans, or Tampa.”³⁶⁹ How does one plan for the densest flood prone area in the US? In the case of Sandy, discussions occurred at the citywide, state, and federal level, including long-term projects like the building of sea walls, changing of building codes, updates to NYC’s Flood Zone and Flood Insurance Rate Maps, and resiliency infrastructure projects for local bodies of water, vulnerable transportation systems, and other initiatives.³⁷⁰ In some cases, government attempted to co-convene these conversations—such as through the Governor’s Office’s NY Rising Program, in which community members voted for projects.³⁷¹ These meetings also occurred around options for Acquisitions for Redevelopment from the State, which offered deals to entire neighborhoods that chose to collectively sell the land.³⁷² In other cases, the options were offered on a one-on-one basis

³⁶⁹ Center for NYC Neighborhoods, “Rising Tides, Rising Costs,” 11.

³⁷⁰ Kehoe, “The City of New York Action Plan Incorporating Amendments 1-19 for Community Development Block Grant-Disaster Recovery Funds.”

³⁷¹ Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force.”

³⁷² Accamando and Lindsey.

from government agencies, such as through the BIB Housing Recovery Program, which offered “pathways” to homeowners:

- Repair: If your home was damaged by Hurricane Sandy, Build It Back completed any remaining repairs.
- Repair with Elevation: If your home was substantially damaged by Hurricane Sandy, Build It Back completed any remaining repairs and also raised the home to comply with flood elevation standards.
- Rebuild: If your home was demolished or damaged beyond repair by Hurricane Sandy, Build It Back built a new home for you that was elevated and will include resiliency improvements.
- Reimbursement: If you made repairs to your home or signed a contract with contractors, your expenses were reimbursed by Build It Back.
- Acquisition/Buyout: If your home needed to be rebuilt or elevated, eligible homeowners had been able to voluntarily sell their home to the government.³⁷³

However, conversations on the future of communities were also happening at the hyperlocal level and were often being facilitated by LTRGs and/or LTRG leaders. One interviewee expressed the challenge of trying to lead community-wide visioning sessions around a unified recovery plan for one’s neighborhood when government programs were offering individual pathways to clients. In addition, interviewees reported very poor coordination around a unified “vision” or “plan” for NYC’s recovery between the Governor’s Office of Storm Recovery, NYC’s BIB Housing Recovery Program, funds from FEMA, and loans from SBA. These programs were responsible for a significant portion of funds allocated to NYC for reconstruction, mitigation, and social services. They may have done more harm in the long term to NYC by failing to set forward a unified plan between them regarding which options (for which populations) would be offered for LTR and mitigation in impacted communities. Interviewees certainly identified this as a significant barrier to their aims to carry out unifying recovery planning: “The coalition was not necessarily always privy to the time frame or vision of the major governmental and nongovernmental resources. So it was amazing that the coalition was able to do strategic

³⁷³ New York City Office of Housing Recovery, “Homeowner Services - Build It Back Program,” NYC.gov, accessed January 26, 2020, <https://www1.nyc.gov/site/housingrecovery/programs/homeowner-services.page>.

planning when we weren't sure what resources are going to go through and how they were going to affect the recovery of the communities we were serving."

Interviewees for the most part felt that they were not successful in identifying a common vision of recovery for their community. They identified the "voting" on projects by NY Rising as perhaps the closest thing to community-wide visioning sessions, but several called that process into question as well with suspicions about which community leaders and government representatives had the ultimate "say" on that vision. Often, the committees would also be separated in such a way that two ends of one geographic area could end up voting on very different projects. Only one interviewee mentioned a visioning session with her LTRG that she felt was successful and included a diverse array of service providers and community members. But as mentioned in the last section, what may have contributed to that success was that this coordinator held the session very early in LTR (in the first six months) while participants still had energy, and the mess of uncoordinated governmental efforts had not yet disrupted LTR on the community level.

2. Setting Goals, Identifying Values, and Reaching Consensus

Despite struggles to identify a common vision for recovery for the wider community being served by the LTRG, all interviewees expressed the focus on setting clear and achievable goals throughout LTR. As outlined in the first section, goals were generally similar with some variations. Goals that were shared by the interviewees include:

- To create a structure to more efficiently and accountably deliver resources and services to Sandy impacted families.
- To make sure that our network was accessible and accountable to the community.
- To reduce the human suffering in our community as quickly as possible by offering them every type of service they might need to get back to being "whole."

One interviewee described the goal of the coalition as bringing together otherwise disparate sectors because it was "the right thing to do for our community." She marveled at the ability to merge the goals of each service type to sketch more meaningful recovery for families:

The Rebuild Committee's goal is to do immediate repairs to moderately damaged homes, so people are safer in their homes. The Legal Committee's

goal is working to help people sort out whatever legal issues are keeping them from being fully recovered. And so on and so on. We wanted to connect all those goals, all those dots. We wanted our recovery to look like neighbors helping one another suffer less, and for less long, than if we had not been helping each other.

This sentiment was generally shared across interviewees, and while it was framed as a goal, it communicates the shared values across these LTRGs. Those values centered suffering neighbors, pulling together the best of what already existed in their community along with the expertise and resources of organizations coming in to help.

3. Experience Reaching Consensus

Although the values and goals outlined above might be laudable, they were not always strong enough to overcome the evils common to coordination settings: ego, self-serving agendas, conflicting beliefs and goals, clashing organizational cultures, and inability to compromise—among other common vices. Interviewees reported that issues often prevented LTRGs from helping organizations, and their clients, make unified decisions about building back, building stronger, or abandoning. Without a common ideal of the recovered state of one’s community, disparate organizations could easily “do their own thing” and serve clients with options that were different from their “competitors.” These issues will be further explained in “Too Many Leaders, Not Enough Leadership,” but they are relevant here because they impacted the ability of the coalition to cohesively guide impacted individuals in a chaotic landscape towards good decisions.

Interviewees described difficulties in coming to consensus around when to build back, build back better, and abandon. In one case, a community came to an agreement about taking an Acquisition for Redevelopment deal in the neighborhood of Oakwood on Staten Island.³⁷⁴ There was some LTRG involvement in that case, but it was predominantly organized by neighbors signing petitions. For the most part, interviewees described their LTRGs as being split on this front. Some members believed in building back homes to get people “back to normal” without any mitigation—at times “going rogue” and building

³⁷⁴ Szekely, “New York Lets Neighborhood Return to Nature to Guard Against Storms.”

homes without the proper permitting for the sake of “getting someone home.” Other members would only build with flood proof materials, were careful about following all new permitting recommendations for flood zones (despite their ever-changing nature), and did not serve clients in high-risk areas. Some case managers successfully guided their clients to make the hard decision of taking the “buyout” from BIB instead of building. However, this experience did not reflect LTRG-wide consensus on how to advise clients. Instead, individual member organizations helped their clients make difficult choices.

Flood insurance education was the only area cited by interviewees with consensus across most LTRG members related to helping clients make decisions around building back, building stronger, or abandoning. With the change of Flood Insurance Rate Maps came vast changes in the community’s flood zones and the amount that they would be paying for flood insurance over the course of their mortgage.³⁷⁵ Clients who had not previously been listed in flood zones suddenly faced thousands of dollars in premium payments each year. Member organizations that focused on legal services, advocacy, and housing led the charge on informing families of these changes before they made decisions such as rejecting a home elevation. Though elevations—covered by BIB for some homes—would lead to further displacement, they could save thousands in flood insurance costs over a thirty-year mortgage and ultimately allow the property to remain an asset to one’s family. Without BIB, most homeowners would not be able to afford elevations, but many were still choosing to opt out because they did not fully understand the future financial and physical risks to their homes.

Two LTRGs made it one of their primary goals to ensure that survivors had this critical information. Their member organizations hosted several events that brought in experts on flood insurance to explain the changes and opened up clinics where people could speak one-on-one with an expert. The role of case managers and legal services organizations in walking families through their options was of immense value in untangling the complexities behind the wicked problem of impossible choices given to survivors. With better consensus building and visioning for the community’s recovery, the tactics used to

³⁷⁵ Center for NYC Neighborhoods, “Rising Tides, Rising Costs.”

inform homeowners about their flood and insurance risks might also help them make smarter and more sustainable wider decisions about their community in LTR.

4. Diversity of Stakeholders

Several interviewees recognized that to understand why people were choosing to stay, build better, or leave, they needed to have leaders with competencies around the cultural, financial, and political barriers that existed in various subsets of the community. Most interviewees acknowledged the importance of these coalitions being “community-led” for better context around people’s hesitations or biases in making decisions. All five LTRGs were driven by some degree by leaders and providers with a history of serving and advocating for their community. These LTRGs were intentional about bringing racial, ethnic, gender, religious, and class diversity into their coalition. Some also recognized the benefits of bringing Sandy survivors into their leadership, who offered firsthand knowledge of the issues facing recovering families. Many acknowledged that they did not reach the diversity that they hoped for, but saw the benefits to understanding why, for example, certain communities might be resistant to abandoning their neighborhood.

One interviewee acknowledged that “since it was mostly service organizations present, and those organizations were often white, that often created less racial diversity.” Another interviewee concurred that this trend arose among organizations with disaster experience who came from out of town to sit at LTRG tables. While she overall had a positive experience working with these organizations, she still felt that the group should have had more people of color present because “the population we were serving were mostly black and brown people.” Another coalition said that they were mostly led by Latino and black leaders; however, there were also significant Asian-American populations in their community who were not as well represented in the group. It made it difficult to understand at times what resources were most needed by those communities to help in their recovery decisions. Distrust of government in some of those communities meant that they were not only disconnected from their local coalition, but also from wider sources. Gender diversity was less of an issue for these LTRGs. In fact, four out of the five interviewees were women, and all five interviewees acknowledged that the coordinating efforts “behind

the scenes” of LTRGs were mostly carried out by women. One interviewee stated that “the coalition itself, among its representatives was about 2/3rds women.” Two LTRGs also had “power symbols” as women in addition to their behind-the-scenes organizers.

One critical way that LTRGs tried to support decisions in LTR was by bringing in Sandy-impacted individuals into the leadership. Three interviewees shared the importance of having survivors not only involved in general meetings, but also taking part in Board, Executive, and Steering committees. In one case, they made the decision early on that “the board of directors of the organization had to be mostly impacted people because we valued the recovery being led by impact, through the people in the community who were impacted.” They were often questioned by organizations with more disaster experience about whether this was a “rational” choice given that these individuals may still be experiencing trauma and extreme stress, but ultimately the interviewee expressed gratitude that this was the case, and felt that their perspectives were critical in understanding why and LTR’s choices sometimes became impossible quandaries.

D. TOO MANY LEADERS, NOT ENOUGH LEADERSHIP

Interviewees offered rich responses regarding successes and crises in leadership. The following questions were identified relating to the wicked problem of having too many leaders across sectors, with poor coordination between them, that impacts LTR: *Were these sectors at the table: (1) community-based organizations, groups, or individuals “new” to disaster, (2) nongovernmental providers with disaster experience, and (3) established EM governmental agencies? How was leadership determined / was there any competition for leadership?* Interviewees described a vacuum in clear leadership and coordination among the biggest players in LTR, which often left them to take leadership into their own hands. They described the distribution of leadership and functions across the three main practitioner sectors identified in the “sandbox” of LTR in Chapter 2 and 3. They outlined what type of leaders and leadership tactics were most effective in the LTRG. And, they describe major failures and struggles of leadership that fundamentally challenged the survival of LTRGs at times, and how those crises in leadership were overcome.

1. The LTR “Leadership Vacuum,” and its Impact on Coordination and Interoperability

Survivors of Sandy in NYC likely provided dozens of providers with similar information in slightly different formats by the fifth year of their LTR.³⁷⁶ In immediate recovery, they would have experienced at least 72 hours of government agencies knocking on doors for damage assessments, weeks of insurance adjustor visits, and door-to-door canvassing and phone banking to assess unmet needs by local, national, and international nonprofits, congregations, businesses, and volunteers. Survivors then weathered intermediate recovery—completing numerous forms for federal assistance from several government programs for personal/housing losses and temporary relocation (e.g. FEMA I.A. and SBA Loans) along with a litany of nongovernmental providers.³⁷⁷ The process repeated itself in a cycle for LTR, but over several years, as survivors sought additional resources because federal assistance was not designed to make them whole and insurance did not provide expected payouts. They likely applied for BIB but submitted information multiple times and waited months or years for a determination.³⁷⁸

Survivors may have also signed up for a DCM with a local nonprofit, hoping to connect with organizations to meet their accruing financial, legal, and mental health needs. All these programs collected critical information on needs, and the patterns of need in impacted communities, but lacked mechanisms for sharing data with one another and contributing to a common operating picture of the community’s recovery.³⁷⁹ At every stage, from the first door knock to the desperate final plea for support, the steps were

³⁷⁶ Reese May et al., “Simplifying and Speeding the Recovery Process” (Wharton, University of Pennsylvania), accessed March 3, 2019, <https://riskcenter.wharton.upenn.edu/digital-dialogues/simplifying-and-speeding-disaster-recovery/>.

³⁷⁷ Federal Emergency Management Agency, “Overview - DisasterAssistance.Gov,” DisasterAssistance.gov, accessed February 28, 2019, <https://www.disasterassistance.gov/about-us/overview>.

³⁷⁸ Office of the New York City Comptroller Scott M. Stringer, “Audit Report on the Administration of the New York City Build It Back Single Family Program By the Mayor’s Office of Housing Recovery Operations” (New York, New York, March 31, 2015), <https://comptroller.nyc.gov/reports/audit-report-on-the-administration-of-the-new-york-city-build-it-back-single-family-program-by-the-mayors-office-of-housing-recovery-operations/>.

³⁷⁹ Reese May et al., “Simplifying and Speeding the Recovery Process” (Wharton, University of Pennsylvania), accessed March 3, 2019, <https://riskcenter.wharton.upenn.edu/digital-dialogues/simplifying-and-speeding-disaster-recovery/>.

repeated: tell the story, fill out new forms, learn new acronyms and eligibility processes, dig up and present an array of verifying documents, and consistently check in with the program's office. Survivors struggling to navigate these many systems were unfortunately in the better position in their community, as less fortunate neighbors fell through the cracks of the many services and received little to no assistance.

Behind these experiences of Sandy survivors is a wicked problem: poor leadership and coordination across a multiplicity of agencies in all of the three sectors playing in the sandbox of LTR. As discussed in Chapter 3, the problem has been widely affiliated with recovery in the US. As one leader in Sandy recovery (and national recovery) aptly put it:

America's relief and recovery programs and processes are too numerous and too complicated for survivors to navigate, let alone in such urgent conditions. These programs and resources were created to help, but the frustration and exhaustion of the process often ends with survivors simply giving up. When disaster strikes, survivors are immediately introduced to the application burden—an alphabet soup of acronyms and programs each with a separate (but similar) application, each with its own scheduled appointments, and each with its own eligibility and documentation processes. These redundancies burden survivors.³⁸⁰

Sandy was used as an illustration of this problem in coverage of the recovery efforts.³⁸¹ In some sense, the city still illustrates a vacuum in leadership and coordination in recovery, as NYC has not yet adopted a citywide recovery framework, or established an official recovery plan, as recommended by the NDRF (as of January 2020).³⁸²

In fairness to early recovery visioning, some attempts took place to establish leadership and coordination for Sandy, especially as the first major domestic disaster to

³⁸⁰ Reese May et al., "Simplifying and Speeding the Recovery Process" (Wharton, University of Pennsylvania), accessed March 3, 2019, <https://riskcenter.wharton.upenn.edu/digital-dialogues/simplifying-and-speeding-disaster-recovery>.

³⁸¹ Office of the New York City Comptroller Scott M. Stringer, "Audit Report on the Administration of the New York City Build It Back Single Family Program"; Klepper, "Hurricane Sandy Survivors' Long Wait for Housing"; Sack and Schwartz, "As Storms Keep Coming, FEMA Spends Billions in 'Cycle' of Damage and Repair"; Raushenbush, "Hey, New York! People Are Still Recovering from Superstorm Sandy."

³⁸² The author is knowledgeable of this status due to professional experience in Sandy LTR in NYC and through her current position at NYC DOHMH.

test the NDRF.³⁸³ Efforts at a federal level attempted to streamline recovery, in part because of the timing of the storm after the relatively recent criticisms of Hurricane Katrina's bureaucracy, inequitable services, and inefficiencies.³⁸⁴ For example, in December 2012, President Obama signed an executive order to create the Hurricane Sandy Rebuilding Task Force.³⁸⁵ Unfortunately, discerning the involvement of non-federal partners proved difficult, the published results of the Task Force include a "rebuilding strategy" rarely referenced elsewhere as a cohesive plan, and related blueprints—such as one created by Rand Corporation—mostly address resilience in infrastructure and not cohesively (such as updated building codes).³⁸⁶ In addition, the theme of much scholarship and media on Sandy over the last seven years has emphasized the barriers of red tape and poor alignment between agencies (the opposite of the Rebuilding Task Force's stated aims).³⁸⁷

On paper, the problems arise from poor interoperability between agencies around critical data like unmet needs assessments and case management tracking. As the Director of the NYC's BIB housing recovery program acknowledged: "After Hurricane Sandy, multiple agencies provided multiple benefits with no relationship, except [their efforts] couldn't be duplicated. For each benefit, homeowners complete a separate application and get a new damage assessment. To have a true continuum of recovery, we need an integrated case management and damage assessment system."³⁸⁸ Of note, the Director referenced how the inability to track the status of benefits resulted in rigorous assessments to ensure that

³⁸³ Hurricane Sandy Rebuilding Taskforce, "Hurricane Sandy Rebuilding Strategy."

³⁸⁴ Olshansky and Johnson, "The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters."

³⁸⁵ Hurricane Sandy Rebuilding Taskforce, "Hurricane Sandy Rebuilding Strategy."

³⁸⁶ Melissa L. Finucane et al., *The Hurricane Sandy Rebuilding Task Force's Infrastructure Resilience Guidelines: An Initial Assessment of Implementation by Federal Agencies* (Santa Monica, CA: Rand Corporation, 2014); Hurricane Sandy Rebuilding Taskforce, "Hurricane Sandy Rebuilding Strategy"; United States Department of Housing and Urban Development, "Hurricane Sandy Rebuilding Task Force: Aligning Federal Support and Cutting Red Tape."

³⁸⁷ Office of the New York City Comptroller Scott M. Stringer, "Audit Report on the Administration of the New York City Build It Back Single Family Program"; Klepper, "Hurricane Sandy Survivors' Long Wait for Housing"; Sack and Schwartz, "As Storms Keep Coming, FEMA Spends Billions in 'Cycle' of Damage and Repair"; Raushenbush, "Hey, New York! People Are Still Recovering from Superstorm Sandy."

³⁸⁸ May et al., "Simplifying and Speeding the Recovery Process."

applicants were not requesting assistance that overlapped with previous aid. These “Duplication of Benefits” assessments—framed as a cost-saving and fraud-avoidant approach—could have been rendered unnecessary with better interoperability between programs. Even more cost savings and fraud avoidance might have been achieved had the status of benefits from initial canvassing through LTR been interoperable between disparate programmatic data management systems.

Again, efforts prior to Sandy attempted to address this problem that did not quite trickle down to the community level. Notably, the federal Disaster Improvement Assistance Program (DAIP) tried to create one “common application” in 2009 for disaster survivors across 17 federal agencies.³⁸⁹ An executive order created DAIP to “simplify applications for disaster assistance” because post-Katrina application processes “were fragmented and slow,” survivors were often unaware of their eligibility across programs, and applicants “had to provide the same information numerous times, creating unnecessary burdens and delays for individuals struggling with the loss of their homes, businesses and loved ones.”³⁹⁰ During Sandy, DAIP helped survivors apply to an array of federal programs.³⁹¹ In theory, DAIP showed progress, but, in practice, its participating programs represent only a portion of the assistance that survivors relied on in NYC and mostly skewed towards short- and intermediate- recovery and *not LTR*. For example, after Sandy, DAIP’s aid to 153,871 New Yorkers predominantly represented FEMA’s Individual Assistance at \$1.2 billion granted, SBA at \$5 billion loaned, and NFIP at \$4.8 billion paid in claims.³⁹² Although significant, this accounting missed, for example, BIB’s \$4.2 billion in assistance over five years of LTR through CDBG-DR³⁹³ It also overlooked the major nonprofit

³⁸⁹ United States Department of Homeland Security, “Privacy Impact Assessments for the Disaster Assistance Improvement Program (DAIP)” (Washington, United States, Washington: Federal Emergency Management Agency, February 26, 2009), 1, <http://search.proquest.com/docview/190241252/abstract/B87DA0B668CC4D86PQ/1>.

³⁹⁰ Accenture Partnership for Public Service, “Serving Citizens: Strategies for Customer-Centered Government in the Digital Age,” 10.

³⁹¹ Federal Emergency Management Agency, “Overview - DisasterAssistance.Gov.”

³⁹² Federal Emergency Management Agency, “Hurricane Sandy FEMA After-Action Report,” 7.

³⁹³ Kehoe, “The City of New York Action Plan Incorporating Amendments 1-19 for Community Development Block Grant-Disaster Recovery Funds,” 6.

contributions, including \$13.8 million for 23,539 cases in DCM and 18,000 housing recovery projects valued at \$20.3 million.³⁹⁴

Throughout Sandy LTR, major forms of non-federal assistance used data management systems predominantly disconnected from DAIP and its federal agencies. Agencies tended to recreate the wheel of databases and lacked mechanisms for referral and data transfer.³⁹⁵ This gap weakened the collective understanding of unmet needs among survivors at any given point in recovery. The disconnect occurred from the first 72 hours of canvassing efforts among city agencies, through to the sixth year LTR managed by local nonprofits—as demonstrated in Figure 15 in “Appendix A. Additional Figures,” which highlights the various programs in NYC and their disparate databases.³⁹⁶ In the case of Sandy, the lack of interoperability between these systems led to continued burdens upon families. The longer completion of complex applications slowed recovery by resulting in longer processing of applications by disaster assistance programs.³⁹⁷ The complexity also made applications less accessible to those not equipped to navigate them, resulting in inequities in access to disaster assistance.³⁹⁸ These burdens also meant additional waste for disaster assistance programs.

Redundancies in services also amassed significant costs. In one particularly unfortunate case, NYC’s housing recovery program paid a total of \$6.8 million to

³⁹⁴ New York Disaster Interfaith Services, “NYC Sandy Unmet Needs Roundtable Assistance & Statistics Report Inception 03.01.13 to 6.30.17,” 1; New York Disaster Interfaith Services, “2015 Hurricane Sandy Voluntary Rebuild Environment,” 10; Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force,” 15.

³⁹⁵ May et al., “Simplifying and Speeding the Recovery Process.”

³⁹⁶ May et al.

³⁹⁷ Sack and Schwartz, “As Storms Keep Coming, FEMA Spends Billions in ‘Cycle’ of Damage and Repair”; Office of the New York City Comptroller Scott M. Stringer, “Audit Report on the Administration of the New York City Build It Back Single Family Program”; Lower East Side Ready! Long Term Recovery Group et al., *Getting LES Ready: Learning from Hurricane Sandy to Create a Community-Based Disaster Plan for the Future*; Alexa Dietrich, “Sandy on Staten Island: Culture, Barriers to Recovery, and the Question of Resilience,” *Natural Hazards Observer* 40, no. 5 (July 2, 2016), <https://hazards.colorado.edu/article/sandy-on-staten-island-culture-barriers-to-recovery-and-the-question-of-resilience>.

³⁹⁸ Rebecca Hersher and Robert Benincasa, “How Federal Disaster Money Favors The Rich,” *National Public Radio*, March 5, 2019, <https://www.npr.org/2019/03/05/688786177/how-federal-disaster-money-favors-the-rich>.

contractors to “provide intake assistance to victims seeking aid, process applications, determine their eligibility, and offer customer support and help New Yorkers navigate a complicated system.”³⁹⁹ As found in an audit by the City’s Comptroller, these upfront costs to pay for systems and individuals to navigate the mess resulted in major wastes of funds: the full payout to the contractors resulted in only 9,126 of 14,029 initial applications processed, including 4,409 incomplete applications.⁴⁰⁰ These complex processes also usually required the hiring of case managers to guide clients, which resulted in additional costs both inside of local agencies and among supporting nonprofits.⁴⁰¹ Interoperability issues also made it more difficult for agencies to “move money” to clients, due to high numbers of dropouts from confusing application processes and long waits for determinations.⁴⁰² Several local and national leaders have noted that current interoperability gaps across disaster programs serving communities on the national/state/local levels create an unnecessary “disaster industry,” in which some profit off of inefficiencies while survivors and taxpayers suffer.⁴⁰³

In addition to a lack of a citywide framework for recovery coordination, and poor interoperability between governmental and nongovernmental LTR providers, NYC has unique political and bureaucratic complexities that impacted Sandy LTR. Perhaps a lack of imagination and advocacy hampered the design of LTR services that could balance speed and deliberation, while also navigating pre-existing issues in NYC. Many of the issues manifested in the struggles of BIB went far beyond interoperability issues. The media consistently criticized the program for its delays, inconsistencies, and misuse of funds, which was corroborated in part in “official” audits by HUD, the NYC Office of the

³⁹⁹ Office of the New York City Comptroller Scott M. Stringer, “Audit Report on the Administration of the New York City Build It Back Single Family Program.”

⁴⁰⁰ Office of the New York City Comptroller Scott M. Stringer.

⁴⁰¹ Office of the New York City Comptroller Scott M. Stringer; Staten Island Interfaith and Community Long Term Recovery Organization, “Testimony of the Staten Island Interfaith and Community Long Term Recovery Organization Before the New York City Council Committee on Recovery and Resiliency.”

⁴⁰² Office of the New York City Comptroller Scott M. Stringer, “Audit Report on the Administration of the New York City Build It Back Single Family Program.”

⁴⁰³ May, “Sandy Recovery & the Disaster Recovery ‘Industry.’”

Comptroller, and academic assessments.⁴⁰⁴ The Comptroller’s audit in March 2015 stated that the program had “failed to implement proper controls to ensure the appropriate, prompt and efficient delivery of services to applicants” for benefits due to: poor monitoring of consultant companies, constant changes in policies, inadequate bookkeeping around contracts, lack of proper training for staff and contractors around eligibility requirements, failures to provide quality control of services, and a lack of tracking of case progress.⁴⁰⁵ When the report was released, only 3,600 applicants had received benefits out of 19,500 initial applications to the program.⁴⁰⁶

LTRGs pointed out these and other issues in testimonies to City Council and submissions of “Public Comments” to the NYC CDBG-DR Action Plan. Several issues at play in the Program’s failures show the vacuum in leadership and coordination in LTR in NYC. First, the City constructed its first housing recovery program with limited experience and frameworks in LTR because of poor pre-incident recovery planning and reportedly unqualified consultant services.⁴⁰⁷ Second, the program’s placement in a political office of the mayor may have brought benefits but was perhaps not sustainable for LTR management. Third—without much LTR experience or a sustained home in local government—BIB was left to navigate complex and evolving building codes, a politicized city construction environment, and the wake of an economic crisis causing a lack of

⁴⁰⁴ Office of the New York City Comptroller Scott M. Stringer, “Audit Report on the Administration of the New York City Build It Back Single Family Program”; Joseph Pereira et al., “Patterns of Attrition and Retention in the Build It Back Program” (New York, NY: Center for Urban Research, The Graduate Center, City University of New York, and the Mayor’s Office of Housing Recovery Operations, City of New York, February 2019).

⁴⁰⁵ Office of the New York City Comptroller Scott M. Stringer, “Audit Report on the Administration of the New York City Build It Back Single Family Program”; Pereira et al., “Patterns of Attrition and Retention in the Build It Back Program.”

⁴⁰⁶ Office of the New York City Comptroller Scott M. Stringer, “Audit Report on the Administration of the New York City Build It Back Single Family Program”; Pereira et al., “Patterns of Attrition and Retention in the Build It Back Program.”

⁴⁰⁷ Office of the New York City Comptroller Scott M. Stringer, “Audit Report on the Administration of the New York City Build It Back Single Family Program”; New York City Long Term Recovery Coalition, “Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8”; Pereira et al., “Patterns of Attrition and Retention in the Build It Back Program.”

housing for displaced residents.⁴⁰⁸ While the program struggled to design itself and navigate these challenges, thousands of homeowners awaited services—uncertain of their eligibility, timeline of services, or need to apply for other forms of assistance.

This discordant landscape post-Sandy in NYC rushed headlong into problems in interagency coordination, interoperability, and the building of new programs in the midst of a complex urban LTR. Although many agencies and individual leaders may have exhibited leadership in their respective focus areas, interviewees indicated a general lack of *leadership across LTR*. Interviewees expressed that throughout LTR the agencies at the “helm” of LTR in NYC remained unclear, in part because no single agency or political leader seemed to want that responsibility. One interviewee gave an especially scathing assessment of this circumstance: “Instead of being driven by vision, it often felt like leaders were driven by chaos, bureaucracy, self-preservation, and fear.”

2. Balance of Leadership Across Sectors

Interviewees shared several approaches to tackling poor coordination, interoperability, and imagination in overcoming the complexity of LTR. One approach was to attempt to the best of their ability to have representatives from the three main sectors of LTR practitioners: governmental EM, nongovernmental EM, and emergent groups. Interviewees generally recognized the strengths, knowledge, and resources offered by each sector and looked for ways to balance those competencies. This integration was sometimes intentional, but often organic. As one interviewee described, “We organically had a nice cross section of different kinds of helpers—very grassroots, but also representatives from government and more formal nonprofits—all stuffed together in a big room with an organized structure for discussing what’s going on and what we can do about it together.”

⁴⁰⁸ Office of the New York City Comptroller Scott M. Stringer, “Audit Report on the Administration of the New York City Build It Back Single Family Program”; New York City Long Term Recovery Coalition, “Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8”; Pereira et al., “Patterns of Attrition and Retention in the Build It Back Program”; Center for NYC Neighborhoods, “Rising Tides, Rising Costs.”

a. Emergent Groups: Community Organizations, Groups, and Individuals

An important feature of LTRGs in NYC was that they were usually co-founded and co-led by community-based providers. This was true for all five LTRGs in this study. These providers were nonprofits, congregations, civic/cultural/service associations, small businesses, and other entities that offered human services throughout the disaster cycle to communities based on local geography and/or affinity group. Because they were rooted in the community they served—and were often impacted by the disaster as well—they had generally developed deep trust and long-term relationships with disaster-affected populations. They represented varying degrees of experience in EM and organizational structure. Most of these providers would be classified as “emergent” under the definition offered by Quarantelli and Stallings and related scholarship on emergence, which includes established organizations that offer emergent post-disaster services.⁴⁰⁹ All interviewees reported that this sector represented the “majority” of membership in their LTRGs. One interviewee also reported that community-based emergent groups had “the most valued opinions,” because leadership felt they would best inform the sustainability of the work past when other non-community-based members might stay involved in the LTRG. Even with this intent, one interviewee mentioned how some community-based groups “didn’t feel like they had the most ‘say’ because they had the least resources at the table.” However, she mentioned how these groups later came to see ways they could exert influence.

Of the types of emergent community-based organizations involved, one interviewee described her members as the “big boys” in the neighborhood that managed large budgets and wide reach. Another interviewee, however, expressed a wide range of “sizes” of these community-based organizations involved, with smaller community-based, emergent organizations brought into leadership roles. There were also variations in types of organizations in this category—for example, two interviewees mentioned a significant role for faith-based organizations (as their coalitions grew out of interfaith networks). One LTRG had “interfaith” in its original coalition name. On the other hand, another interviewee expressed the struggle to secure the involvement of local congregations or faith

⁴⁰⁹ Stallings and Quarantelli, “Emergent Citizen Groups and Emergency Management.”

communities. The role of businesses, healthcare providers, and civic and cultural associations, among types of emergent groups, revealed similar variations.

In addition to these groups and organizations, several affiliated and unaffiliated volunteers took part in LTRGs. Many of the unaffiliated volunteers were recovering individuals who opted to advocate and serve their impacted community. Others were local community leaders or organizers who took on the cause of recovery and leveraged pre-existing platforms for advocacy and coordination. Of the affiliated volunteers who took part as individuals, several were from nationally-recognized voluntary groups—notably Community Emergency Response Teams, Civic Corps Councils, AmeriCorps, and Medical Reserve Corps. Some represented local volunteer management agencies, such as New York Cares. Disaster survivors and disaster-affected community advocates were more likely to engage with LTRGs through public meetings, trainings, and direct services; however, they often also participated as volunteers on LTRG Boards or committees, or as LTRG support and coordination staff. One interviewee self-described herself as an unaffiliated volunteer who became the coordinator of the coalition. Another interviewee, however, described her coalition as mostly lacking individual, unaffiliated leaders.

b. *Nongovernmental EM*

National, state, or regional VOAD members with EM experience were also frequently members of LTRGs. All five LTRGs contained VOAD member organizations as formal members or recognized partners of their LTRGs. In NYC, some LTRGs were more formally recognized as members of NYC or NY VOAD—such as the SI LTRO—but most maintained an informal affiliation with and recognition from the VOAD “movement.”⁴¹⁰ At least one LTRG was co-founded by representatives of two VOAD organizations, along with community-based organizations, while other LTRGs had VOAD members in their Steering Committees or Board of Directors. In addition, certain services like DCM and volunteer management maintained a heavy participation by VOAD organizations due to skills in those service arenas from past LTR experience. Regardless

⁴¹⁰ Staten Island Non-for-Profit Association, “Staten Island Community Organizations Active in Disaster.”

of the formality of their connection to VOAD, LTRGs often enmeshed the values, and/or the members, of the VOAD movement into their structure.

VOAD organizations in the Sandy LTR landscape had a significant role as funders—notably, United Methodist Committee on Relief, Salvation Army, American Red Cross, and Catholic Charities. While they mostly distributed funds at the citywide UNR, they sometimes funded directly at LTRG committees—especially later in LTR. The organizations often had the most resources at the table to distribute (governmental EM may have had the most resources allocated to them for LTR but were not reported to be the largest distributors of those resources at the LTRG table). Some interviewees expressed that VOAD member organizations often ended up with too much “influence” in LTRGs because of funding tied to expectations. Other interviewees disagreed—wishing that the VOAD members had taken more leadership:

Yes, [nongovernmental EM organizations] were there, but they did not contribute as much to the leadership as we thought they might. They didn't really help in building out the structures, which we sorely needed. And we looked at them like you are the pros. You're the disaster geniuses, right? Basically, they threw it back at us: well, what does your community want? And we would respond: well, what should we do? We're new to this. We don't know about disasters. This is all very new. And then the cycle of questions would repeat—like a comical skit.

One interviewee expressed that VOAD agencies had not been over- or under-influential but played a role as “advisors,” which she felt was appropriate and communicated to the LTRG: “They sent people to our general meetings to share situational awareness and to provide counsel, but they weren't driving the specific work that our coalition wanted to do because anyway they're bound to their particular missions. We wouldn't have wanted them to ‘drive’ our work anyway.”

c. Governmental EM

All five LTRGs had the participation of governmental EM through FEMA VALs at some point in their development. Most had FEMA VALs as supportive figures in their founding, and were actively involved in the first year and a half of development. Four out of five interviewees mentioned the departure of FEMA VALs about a year and half into

their recovery, with an array of opinions on their role and departure. One interviewee remembered a VAL introducing the group to the LTR Guide that contains the LTRG model—which the group later adapted. They cited the VAL, and other FEMA resources and support as critical, but were upset by the abrupt disappearance of FEMA from the table at the 1.5-year-mark. Another interviewee described this disruptive departure as “an abrupt breakup,” joking that their VAL was like “Mary Poppins.” A third interviewee mentioned being saddened by the departure of the VAL and was complimentary of their approach: “The way they advised us was well done because they never told us you have to do it this way. They just share their own experiences and said I’ve seen it work.” One interviewee found their VAL helpful, but sometimes “misguided.”

Four interviewees mentioned that, outside the VAL, there was little government representation at their coalition meetings. As one interviewee reported: “Established emergency management agencies were not present outside the early VAL. They had no idea what we were doing. They knew we existed, and one or twice we invited them, but they just didn’t come.” Reports by elected officials in NYC verify these claims, with NYC’s Public Advocate stating that “the challenges faced after Hurricane Sandy mirrored those experienced by CBOs [community-based organizations] during Hurricane Katrina, where the vast majority of CBOs indicated that they were unconnected with the City’s emergency management system.”⁴¹¹ It was more uncommon for city government in particular to take part—though later in LTR there was increasing representation from NYCEM, DOHMH, the Mayor’s Office, the Comptroller’s Office, City Council, and the Borough Presidents’ Offices. While rarely members, these representatives of NYC’s legislative and executive branches (and affiliated agencies) sometimes offered sources of technical assistance, training, and funding. There was some representation from BIB in attempts to better align city resources with LTRG services, but was reported predominantly two to four years in the LTR. Some LTRGs also had active participation from the Governor’s Office of Storm Recovery, notably SI LTRO.

⁴¹¹ de Blasio, “Supporting Community-Based Disaster Response: Lessons Learned from Hurricane Sandy,” 2.

Engagement with local elected officials also widely varied. While their offices were usually not members, three interviewees noted that they had active representation (and in one case also funding) from local city councilmembers, assembly members, and congress persons. At least one interviewee, however, described scant involvement with local officials, which she attributed in part to failure of their coalition to establish Aldrich's "vertical link": "We didn't really connect with the local politicians because we thought they didn't work in favor of the community. But in hindsight, I would not advise anybody to do that. I would advise, good or bad, to prioritize the political relationships, which we did not have. Because that is a vertical link that is critical." Three interviewees indicated participation of hyper local forms of government, such as civic/property associations and community boards. Thus, governmental EM and non-EM agencies were sometimes participants (and indirect co-founders in the case of VALs) of LTRGs in NYC.

Through participation of organizations in all three sectors of primary LTR practitioners, LTRGs attempted to balance emergent and established, local and non-local, and EM-focused and non-EM-focused entities. For example, the SI LTRO contained each cross-section in the coalition's 90+ membership in 2014, as shown in Table 5.

Table 5. Types of Nongovernmental Organizations in an LTRG in NYC via Example of the Staten Island Long-Term Recovery Organization (2014)

	PROVIDED LTR SERVICES AS PRIMARY MISSION		PROVIDED LTR SERVICES SECONDARY TO MISSION	
	MISSION LOCAL TO NYC	MISSION NOT LOCAL TO NYC	MISSION LOCAL TO NYC	MISSION NOT LOCAL TO NYC
ESTABLISHED NONGOVERNMENTAL	<u>American Red Cross of Greater New York</u> Pre-designated EM roles in LTR – member of NYC VOAD	<u>United Methodist Committee on Relief</u> Pre-designated EM roles specifically in LTR if local jurisdiction requests aid; member of National VOAD	<u>Tunnel to Towers Foundation</u> Formed in response to 9/11 and had some EM experience; Sandy housing recovery became secondary mission	<u>New York State Nurses Association</u> Medical emergency management experience, though hurricane support was secondary mission
EMERGENT NONGOVERNMENTAL	<u>Yellow Boots Volunteers</u> New volunteer group formed with mission to muck/gut/repair homes	<u>Occupy Sandy</u> New volunteer group formed out of National Occupy Movement to serve region after Sandy	<u>Meals on Wheels of Staten Island</u> Little to no EM experience; food delivery post-Sandy became secondary mission	<u>Sarapis Foundation</u> Open source software organization; offered web and digital support services during Sandy as secondary mission

The author designed this table from archived resources from the Staten LTRO, combined with personal knowledge as the former Coordinator for this coalition (2014-2015). Staten Island Interfaith and Community Long Term Recovery Organization, “Staten Island Interfaith and Community Long Term Recovery Organization - Home,” accessed October 8, 2018, <https://sisandyhelp.org>.

Regardless of the struggles and gaps between these sectors, interviewees expressed that their coalitions were ultimately successful at bringing together representatives from each sector, and from the local, state, and national level. Even with gaps particularly in the governmental EM sector, leaders of these LTRGs attempted to fill in the vacuum of leadership in the wider landscape with intentional and broad-based organizing that brought as many perspectives and resources to the table.

3. Competition, Struggles, and Failures of Leadership

Several coalitions struggled to battle the wicked problem of unclear leadership in LTR. Some attributed this to misguided attempts by FEMA VALs and VOAD members, who sometimes “empowered” the wrong leaders. In these cases, they lent funds, critical information, and legitimacy to individuals who were false gatekeepers for the impacted community. One interviewee described frustration at encouragement and support being given to community leaders by “disaster professionals” who she observed as doing a lot of harm to their community by not understanding the local dynamics:

FEMA VALs were helpful but at times acted strange. For example, one VAL kept saying: “Ya’ll are doing great. So proud of your work.” But we were making major, horrible mistakes right and left. And I kept thinking: Please, don’t come in and say that. We had major issues, and it was being affirmed by folks with knowledge and money.

In that scenario, the coalition eventually started in earnest over a year later, “through pain and turmoil.” She described the group as experiencing a change in leadership in which “the new leader was very diplomatic and gracious, and basically helped the old leader step down.” Although a helpful transition, she mourned the critical resources that the LTRG lost during that first year in which the most attention, funds, and organizational participation was available to LTRGs. She mentioned one example of a critical VOAD organization with wonderful experience whose leader became fed up with the LTRG and decided that their organization should leave the community. She reflected that the contention of that first year led to the loss of several of these types of critical organizations, which ultimately hurt the community members they were trying to serve.

An even more severe narrative was offered for another LTRG, that was replaced by an entirely new coalition. The first “divisive” one had been co-opted by leadership that the interviewee claimed was stymieing the distribution of funds and creating contention between members. When the interviewee came in, people had more or less “given up” on the collaborative recovery idea, and funders and VOAD organizations were beginning to leave to work in other areas. She reformed the coalition by making it more decentralized, having quick wins, and showing that the group could benefit from more funds and support through accountable and transparent processes. Nonetheless, these issues caused delays

that seemed to have long-term impacts on the LTRG and on the community it served. That interviewee explained that places that saw earlier coalitions and fundraising, without internal leadership crises, had more successful LTR.

Several interviewees expressed that the political nature of LTR in NYC was “at times more exhausting than the actual recovery work.” One interviewee reiterated the importance of an organizer who understands the powers at play: “Because there are so many power structures involved in recovery, if you don’t have experience, it’s a sad game. It was really hard for me in NYC, and I had an experience in both organizing and disaster work. Even with that, I was not prepared for how intense and ugly the power battles were.” Another interviewee cited the most frustrating part of her job as the time wasted dealing with “external political barriers” like the poor coordination between federal, state, and local government “that were only made worse by internal political barriers at times.” She called the divisions inside and outside of the coalition as “really demoralizing when you are already struggling against a frustrating and confusing recovery process.”

When asked how to solve these issues, one interviewee responded that “it is a question about human nature—more of a theological question, you might say.” In addition to listening and seeking less ego-driven leaders, two interviewees emphasized the need for coalition members to “call out people who were causing problems.” One described the approach towards disruptors: “If anyone came in to try to take over (especially people who weren’t from the community) or challenge in a way that group felt was unhealthy or mean, the leadership would call them out in public and in private, in as respectful and professional a manner possible.” Another interviewee laughingly called this the “smack down,” and noted that it had to happen quickly before a person got too entrenched in the group.

Other interviewees said that it could be possible for disaster professionals—like VOAD or FEMA VALS—to help a coalition identify leaders if they had a better process for doing so. One interviewee suggested this approach for EM-experienced leaders who aim to counsel an LTRG with its identification of leadership:

You've got go to the coffee shop or wherever it is that the people are hanging out and listen. People will tell you the stories. You'll build trust and people will start telling you the truth about who's liked and who's not liked. You

have to listen to quite a few people because you're looking for themes. There's always going to be somebody that doesn't like somebody, but themes will start showing and maybe show the actual leaders.

A second interviewee gave nearly the same advice: "Listening is important for FEMA VALs and VOAD to do from the very beginning, because people would come out there and would search for the people with titles. Those weren't necessarily really the people who were advocating and who were busy working for the people. The people doing a lot of good collaborative work weren't the official leaders." All interviewees outlined the importance of having leaders with certain skillsets, and accompanying accountability structures like Steering Committee, Subcommittees, and voting process. The latter structures were earlier explored, but the next section will review the types of leaders that LTRGs recommended to help navigate the complexity faced by their coalitions.

4. Selection and Type of Effective Leaders

Interviewees offered several thoughtful analyses of the *type* of leaders that flourished in LTRGs, and that perhaps are suited to LTR *writ large*. Their descriptions are organized into four types of leaders: the preacher, the servant leader, the strong advocate, and the behind-the-scenes organizer. Many individuals were reported to have contained qualities from each of these roles, while others were mostly identified with having played only one of these roles.

a. *The Preacher*

All of the interviewees shared that at least one of their leaders had skills in inspiring members towards collaboration, setting aside egos, and centering community members. One interviewee called this person "the preacher," even though they were not a religious figure. In one case, the interviewee described the unique skill of one leader in capturing attention as "a badass speaker who knows how to move the crowd." In addition to rousing members to action, these individuals often had to also bring members back to the primary mission behind the work. One interviewee mentioned a moment at the beginning of the LTRG's development when he asked: "Are you in this because you want the glory and to be the hero, or are you in this because you care about collaborating and sharing resources

and fostering a sense of community here? We’re looking for the latter.” These individuals showed skills in addressing issues with organizations wanting to work in siloes or wanting to get their own credit or resources rather than sharing.

An interviewee used the word “pastoral position” to also describe their leader as someone who helped people “believe” in the coalition. She explained: “Trusting and working with one’s neighbor is not always innate to people. It’s as if you need a good preacher (religious or not) to bring them to the light.” In her case, however, they had religious leaders who were skilled at “preaching the gospel of collaboration.” Two interviewees were religious leaders and referenced similar approaches of balancing individual fulfillment with collective good in others who were not religious. These were often also the individuals who were in the “symbolic” leadership position with formal titles like “President” or “Chair.”

b. The Servant-Leader

A position that is similar to the preacher but slightly different is that of the servant-leader. These were leaders who did not take up a lot of space in the LTRG but were seen as sources of wisdom and synthesis of perspectives. They often drew this wisdom from focusing on service to each individual member of the coalition—giving a lot of space among various leaders to air grievances and ideas. One of the interviewees tried to take on this role because she felt that giving space and “working through the hard stuff was sometimes the way you actually get work done.” Another interviewee sketched a leader who was the “Solomon” of their group:

Our leader was a skilled and quiet facilitator. His way of chairing the group was collaborative. He was very impartial. He had opinions, but he rarely shared them. He knew how to let other people speak and do the work. He would act like Solomon—sit there and nod and listen—which annoyed some people but was ultimately needed. He would also be very measured when we would take on actions or have to weigh in on important decisions, which helped set a tone of calm for the whole group.

An interviewee who had experience with FEMA prior to her role advised that FEMA VALs and VOAD organizations should pay special attention to connecting persons who take on these characteristics when they enter a community: “You want to find out who

the servants to the community are, and that takes a while sometimes. But the servants to the community—they exist, you know.” Other interviewees also described playing down the leadership positions, describing “roles of shared accountability” rather than “roles of power.” In her case, she “was a powerless decision-maker.” They did everything by consensus “which actually wasn’t as hard as you might think when you are consistently checking in individually with members and ensuring they feel comfortable taking part in the space.” Since their skillsets trend towards neutrality, quiet, and compromise-building, people often placed them in the role of mediator. It was also critical that leaders understood how to navigate when the group was not going to reach consensus because of some significant differences in ideologies. When there were political differences around discussing inequities, these leaders were skilled at finding ways to continue the work: “When we would have arguments around the role of systemic inequity in our work, for example, our facilitator helped us each focus on the services that we were good at, which, for example, might be more social services or more construction-related.”

c. The Strong Advocate

Interviewees generally did not speak favorably on the role of a strong, power figure in their LTRG, but they did acknowledge that the role existed and sometimes even benefited the group. This leader was often a “larger-than-life figure”—perhaps someone who was already well known in the community for advocacy and fearlessness in calling out problems. These were individuals who often “spoke for the community” in other settings such as in meetings with elected officials or in public forums—whether or not the LTRG desired that to do so. Their benefit, however, was that they were often the most recognizable to powerful entities like media, government, and elected officials, who often respond to “the loudest person in the room.” One interviewee acknowledged the possible benefits of having this figure affiliated with the coalition—especially because unfortunately the “squeakiest wheel often does get the oil.” In that sense, these individuals could “use aggression to get things done.” Another interviewee cited that a strong leader can be effective “as long as they are fair, equitable, and transparent and there are modes for keeping their power in check and soliciting feedback from impacted people.” She

warned that they need to “not just be aggressive because they are power hungry, but rather because they are fighting hard for your cause.”

d. The “Behind-the-Scenes” Organizer

All interviewees attributed the success of a LTRG to whether the group had a highly skilled “organizer” behind the scenes. Three interviewees self-described themselves as having this role, with one stating that “what you need is someone who knows how to build a coalition instead of someone who is the absolute boss.” Behind the “preacher” and “servant-leader” were often people leading the ground-work. An interviewee was grateful that her community had a number of these individuals: “Some really great community leaders out there—people who were invested in the community who weren’t the known leaders. They were people who knew how to get stuff done.” Often, these organizers liked to partner with the symbolic leader, with one interviewee describing that “my leader would speak and I would do, and we did so much good work that way.” The interviewees also shared the value of having individuals with a balance of organizing and EM experience. One interviewee, who had the most EM experience of the interviewees, felt that the value of the former was more critical: “Ideally, coordinators of these coalitions have a balance of experience and training in emergency management and organizing, like I did. But if given the choice between choosing someone with EM experience and someone with organizing experience, I’d choose the organizer. LTRGs are really more about organizing.”

This role was also critical in managing the subgroups and committees that would often form across a diversity of service providers. The organizer often helped form subgroups, which was one way to redistribute work and in some cases, to resolve conflict by splitting up members in their “in-groups” to achieve certain goals:

Because it was a relatively large network in the beginning, there were subgroups forming with different goals. For example, one subgroup was more focused on climate issues and wanted to ensure recovery included the integration of solar panels and green roofs. Not everyone in the group had that same angle as a priority, but the leaders always encouraged groups with those aims to form their own committee and complete their own projects, reporting back to the wider group. Instead of shutting them down, a good organizer challenged persons with goals, priorities, and ideas to pursue those on their own and then connect back to the network.

Another interviewee described a similar approach in helping people at the table do what they were most interested in: “Everyone who wants to talk about rebuild sit over there, everyone who wants to talk about mental health, clothing, food, immigrant outreach, needs assessment—organize yourselves and come up with projects.” Individuals who had the skills to help build and connect these groups were often seen as people with a full and detailed picture of the work and progress of recovery across organizations. This skill made them an authority, but not a power. They built on knowledge and labor, not awe and fear.

e. Process for Identifying Leaders

Two interviewees said that leaders were selected more organically—basically a “coalition of the willing” who were able to do the extra work that came along with serving the coalition in addition to one’s own organization. One interviewee reflected on the drawback of these self-identified leaders whose motivations were not always clear: “Sometimes people take on more work as a sort of savior complex, or as a way to stroke their ego. There is a negative side to that, but then again at the end of the day they were also the ones putting themselves forth to do the hardest work. They did the coordination to bring in the VOAD groups and to dole out jobs to them, so it was great. With that said, egos and savior mentalities got in the way of collaboration sometimes.” Three interviewees cited that most formal leaders were elected to their positions, with a series of informal leaders selected by leadership for certain roles. Several coalitions did not have elections but did have mechanisms for accountability and participation.

In an LTR landscape strewn with poor coordination, interoperability, and leadership, LTRGs sometimes struggled with the same wicked problem. However, they also actively attempted to counteract this problem. Their coalitions emerged from the need to coordinate across organizations with diverse resources and skills to streamline recovery. Despite major challenges accompanying any endeavor that brings together disparate stakeholders, all five interviewees outlined visions and tactics used to practice intentional leadership and interoperability. In that sense, they demonstrated ways to make sense of, and tackle, this wicked problem at the community level.

E. COSTS OF SLOW BURNING CRISES

The immense costs of LTR outlined in Chapter 2 have been referenced throughout this Chapter. Although many of the wicked problems that have been used to outline this qualitative analysis were co-morbid, issues around the vast costs of LTR were a significant pain point and strong common thread woven throughout most interviews. The questions that specifically prompted interviewees to reflect on this domain were: *What resources were available for this work before and after the disaster? How were resources secured and distributed among coalition members?* Interviewees outlined the landscape of funding available to their LTRG and reviewed the processes they used to identify, secure, and distribute funds.

1. Landscape of Funds for Sandy LTR in NYC

Hurricane Sandy cost \$71 billion in damages, making it the second costliest hurricane in U.S. history at the time (now the fourth costliest, surpassed by Hurricanes Harvey and Maria).⁴¹² The response and immediate recovery from the storm galvanized immense resources and attention not only from NYC, but also from agencies across the country that deployed resources through mutual aid.⁴¹³ FEMA executed one its “largest deployments of personnel in its history” at the time, delivering “over \$1.2 billion in housing assistance to more than 174,000 survivors, and obligated over \$800 million for debris removal and infrastructure restoration.”⁴¹⁴ As noted, the total funds allocated to families for LTR spanned across a multiplicity of governmental and nongovernmental programs. On the federal government level, FEMA’s Individual and Household Assistance Program with \$1.2 billion granted, Small Business Administration at \$5 billion loaned, and the National Flood Insurance Program at \$8.8 billion paid in claims represented the biggest payouts.⁴¹⁵

⁴¹² Office for Coastal Management and National Oceanic and Atmospheric Administration, “Hurricane Costs,” Coast.NOAA.gov, July 20, 2019, <https://coast.noaa.gov/states/fast-facts/hurricane-costs.html>.

⁴¹³ Federal Emergency Management Agency, “Hurricane Sandy FEMA After-Action Report.”

⁴¹⁴ Federal Emergency Management Agency, iii.

⁴¹⁵ Federal Emergency Management Agency, 7; Insurance Information Institute, “Facts and Statistics: Flood Insurance,” III.org, accessed January 25, 2020, <https://www.iii.org/fact-statistic/facts-statistics-flood-insurance>.

HUD-funded CDBG-DR funds accounted for \$4.2 billion in assistance over five years of LTR in NYC.⁴¹⁶ This figure does not include the separate \$4.4 billion in CDBG-DR funds allocated to NY State.⁴¹⁷ It also misses the nongovernmental sector, which is further explored in the next section. Figure 16 located in “Appendix A. Additional Figures” demonstrates the wide array of funds for recovery and mitigation across major sources.

Significant costs were also incurred in personal damages and government support, but a major toll fell on insurance. As of 2019, NOAA reported that New York led the nation as “number one” in insured coastal properties vulnerable to hurricanes at \$2.92 trillion, compared to Florida at \$2.86 trillion and Texas at \$1.17 trillion.⁴¹⁸ Before the changes in flood maps and insurance legislation that followed Sandy, many New Yorkers were paying premiums for flood insurance that vastly undervalued the immense risk and worth of their properties. This discrepancy meant that private insurance companies taking part in NFIP had not accrued enough funds to pay out claims to the maximum coverage for thousands of insured properties. They needed major support from taxpayers via the NFIP, which sometimes led to falsified damage reports meant to underpay homeowners.⁴¹⁹

Homeowners experienced damage costs that far exceeded the NFIP flood insurance coverage of \$250,000 for damages to the building and \$100,000 for damages to contents.⁴²⁰ To give context to how much insurance might cover of total LTR damage costs, BIB had designated caps on the funds assigned to projects in December 2014 at “\$729,750 for a single family, \$934,200 for a two family, \$1,129,250 for a three family, and \$1, 403,400 for a family of four and up.”⁴²¹ As a case manager, this author had cases in 2017 that had

⁴¹⁶ Kehoe, “The City of New York Action Plan Incorporating Amendments 1-19 for Community Development Block Grant-Disaster Recovery Funds,” 6.

⁴¹⁷ Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force.”

⁴¹⁸ Office for Coastal Management and National Oceanic and Atmospheric Administration, “Hurricane Costs.”

⁴¹⁹ David W. Chen, “Guilty Pleas to Falsifying Reports on Hurricane Sandy Damage,” *New York Times*, January 10, 2017, sec. New York, <https://www.nytimes.com/2017/01/10/nyregion/hurricane-sandy-damage-geb-hirise-engineering.html>.

⁴²⁰ Chen.

⁴²¹ New York City Long Term Recovery Coalition, “Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8.”

approached these caps (some cases approaching one million in costs paid to rectify immediate and accrued damage). Some cases in this range still did not have enough funds to complete repairs, even with nearly maximum payouts from flood insurance, homeowner's insurance, FEMA Individual Assistance, SBA Loans, and private assistance. And these costs only reflect recovery *without mitigation*. The added costs of mitigation ideally embedded in all LTR must also be considered. A single home elevation raising the home seven feet to meet the requisite two feet above Base Flood Elevation could exceed \$600,000 in costs (in addition to the reconstruction costs).⁴²² Interviewees attributed high costs to the overall expenses of working in NYC, the political nature of local construction, and extremely complex, slow, and ever-changing building code requirements and reviews. These issues accompany any construction in NYC, but were exacerbated in Sandy LTR. As one interviewee quipped, "If you have the money, guile, and patience to build something in NYC, you can build it anywhere."

Meanwhile, families waiting for insurance payouts or CDBG-DR-subsidized reconstruction or elevation accrued costs in temporary housing, legal fees, health issues, and the complications that accompany abandoned homes. These complications incurred more costs for homeowners awaiting services, including: pipe bursts that re-flooded the home; fires, especially from neglected electrical systems; infestations of rats, termites, and other vermin; unmaintained roof leaks that destroyed drywall, electrical/mechanical systems, woodwork, and carpets; break-ins and squatters; and slow leaning of the home's framing/sinking of the foundation that caused the willowing of walls and roofs.⁴²³ Costs from these secondary hardships could be immense—sometimes surpassing the value of the property in repair costs. They are some of the clearest manifestations of how the “slow burn” of recovery causes greater costs *because* of LTR failures in the U.S. to balance speed and deliberation.

⁴²² The author is aware of these costs from her service to a home elevation program in NYC.

⁴²³ New York City Long Term Recovery Coalition, “Joint Comments Submitted by the NYC Long Term Recovery Coalition for the Build It Back Proposed Action Plan Amendment 8”; Center for NYC Neighborhoods, “Rising Tides, Rising Costs.”; This author also witnessed those issues firsthand as a case manager for Sandy-impacted families.

2. Resources Available for LTRGs

LTRGs received most of their resources from their member organizations, that in turn received the bulk of their support from nongovernmental entities (as is noted in Figure 13). The only major sources of governmental funding to LTRG member organizations that interviewees identified were: Social Services Block Grant–Hurricane Sandy Supplemental for case management; CDBG-DR for some housing and legal services that supported BIB and NY Rising; and mental health-specific grants through federal, state, and local health and mental health agencies. Of the breakdown of nongovernmental funds, “more than three quarters of the private funding that went to New York City” came from “locally-based donors,” such as local foundations, nonprofits, and individual donors.⁴²⁴ A cross-section of those local providers can be seen in Figure 13.

⁴²⁴ Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force,” 15.

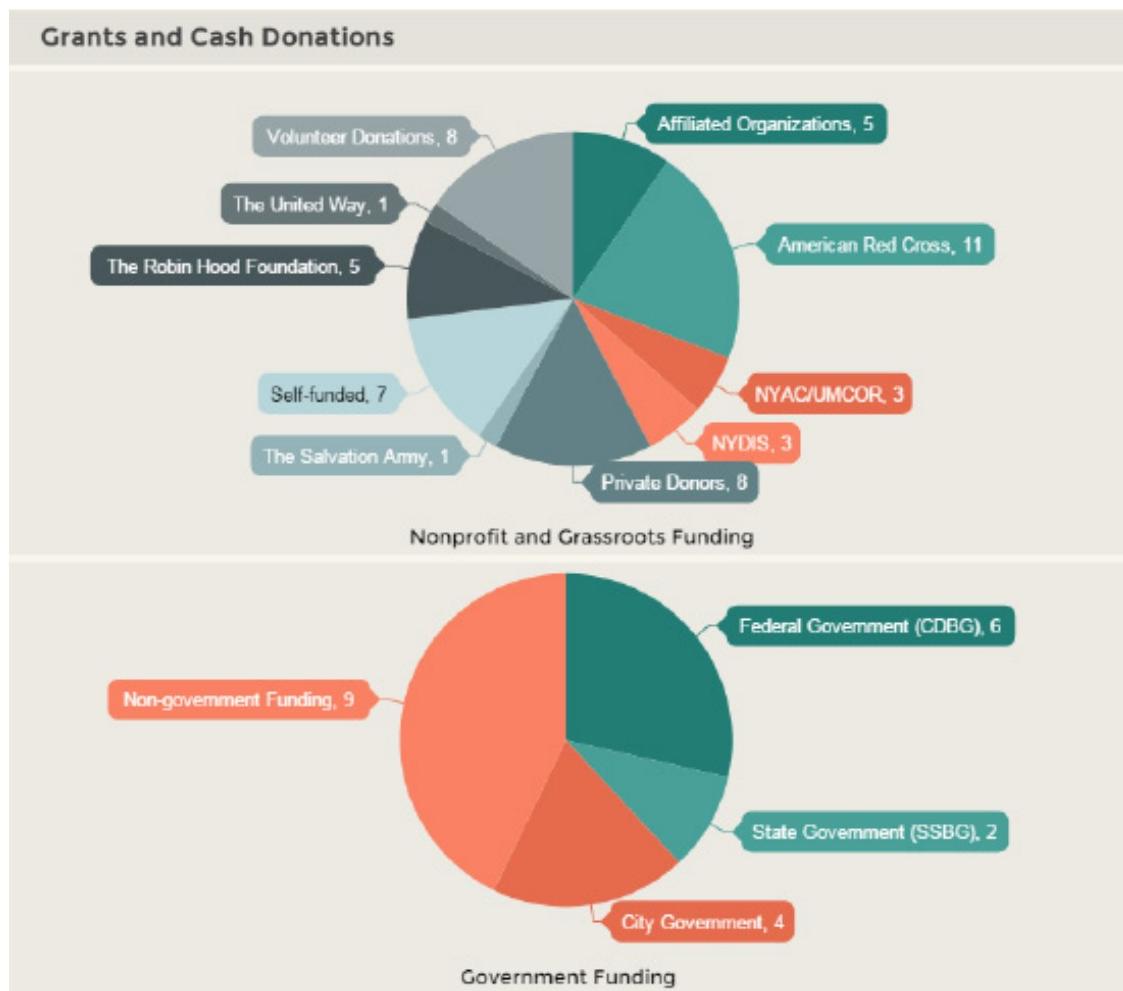


Figure 13. Sources of Grants/Donations of Nongovernmental Organizations in NYC. Source: NYDIS (2015).⁴²⁵

The costs incurred and distributed by nongovernmental entities are more difficult to quantify, ranging over a multitude of providers, some not affiliated with VOAD and/or LTRGs. However, the UNR that distributed funds from the major VOAD organizations and had representation from LTRGs in every borough, calculated \$13.8 million distributed for 23,539 cases through DCMs and 18,000 housing recovery projects valued at \$20.3

⁴²⁵ New York Disaster Interfaith Services, “2015 Hurricane Sandy Voluntary Rebuild Environment.”

million.⁴²⁶ As mentioned, the 2015 survey by NYDIS of LTR organizations also projected \$41 million saved in volunteer labor and \$21 million saved through in-kind donations.⁴²⁷

Over 72 percent of respondents for that 2015 report took part in LTRGs and leveraged those coordinating structures to achieve their aims.⁴²⁸ However, calculating the total costs incurred directly by LTRGs in NYC would require more complete data. Interviews provided some context on the source and scope of funds allocated to, and spent from, LTRGs. All five interviewees expressed that funds dedicated for coordination of LTRGs came from nongovernmental sources. Resources dedicated for coordination of LTRGs included: fundraising among members of the coalition and the public by coalition leaders; community and national foundations (e.g. Staten Island Foundation, Women's Foundation, Ford Foundation); emergent groups (e.g., Occupy Sandy); VOAD organizations (e.g. American Red Cross, Salvation Army); the offices of local elected officials (e.g. city council discretionary funds); and (perhaps most importantly) member organizations that donated staff to coordinator roles.

The support for coalition coordination was considered critical. Only one LTRG had a full-time coordinator. Three others had part-time coordinators funded full-time by member organizations (their scope of work contained other tasks). One coordinator was an unpaid volunteer. Notably, three of the four LTRGs with full or part-time coordinators funded early are still functioning coalitions today. Several interviewees recommended the allocation of funds for a dedicated coordinator: “The group was able to have someone coordinating all this work because I was funded to do this full time and I devoted so much of my life to it even beyond the ‘nine to five.’ It is a make-it-or-break-it-point: you need to invest in coordination, and that starts by investing in dedicated and trained staff who have some passion for the coalition work.” Another interviewee noted the difficulty of rallying people to volunteer coordination without that dedicated position: “At times, it was so

⁴²⁶ New York Disaster Interfaith Services, “NYC Sandy Unmet Needs Roundtable Assistance & Statistics Report Inception 03.01.13 to 6.30.17,” 1; New York Disaster Interfaith Services, “2015 Hurricane Sandy Voluntary Rebuild Environment,” 10; Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force,” 15.

⁴²⁷ New York Disaster Interfaith Services, “2015 Hurricane Sandy Voluntary Rebuild Environment,” 7.

⁴²⁸ New York Disaster Interfaith Services, 7.

difficult to run because we all had busy jobs with a lot of responsibilities. To carve out volunteer time to run this giant coalition was tough.”

a. Filling Gaps

The coalition ended up being a significant source of support for impacted families during periods where government resources were not available, specifically between “tranches between federal money flowing into a community.” One interviewee described frustration at this unknown:

I remember people were angry by how long it took for a Disaster Case Management Program to form. I remember saying to VOAD partners who were trying to explain the timeline for Social Services Block Grant and CDBG-DR, and the Unmet Needs Roundtable: why is this so slow? We were waiting on programs from the big guys in government and VOAD, and meanwhile, there were people using a bucket for a toilet for months.

While awaiting these programs, many LTRGs felt responsible for serving community members—especially community-based members with deep relationships to suffering neighborhoods. One interviewee described how filling these gaps was core to their mission, and distinguished how their modes of delivery differed from other programs:

We felt a moral obligation to get resources into the hands of the people who needed to recover, and to trust them to know how to use it. Sometimes they didn’t use it correctly, but these were our neighbors and they were knocking on our doors asking for help. Institutions with most of the money were shielded from that door knocking—shielded from human beings who were suffering and asking daily for help. These institutions that have been doing this for a long time also don’t seem to trust people to know how to spend their own money. But maybe it’s not respecting personal agency when you spend months designing programs to protect institutions more than people.

While this perspective may come across as an opinion, it explains how LTRGs sometimes situated themselves in the wider funding landscape. As previously noted, many of their missions focused on streamlining services for disaster-impacted families. It would make sense, then, that some groups would feel the need to fill in gaps between programs or catch clients that fell between the cracks of the many, uncoordinated initiatives.

3. Coalition Process for Distributing Resources

The distribution of resources by LTRGs in NYC evolved over time. This evolution relates in part to the relationship between LTRGs and a citywide UNR that raised funds among major VOAD members and foundations, distributing to cases via DCMs. DCMs would present cases to the UNR, which would decide on eligibility, match to relevant sources of funding, and track the progress of cases in an online portal. The interviewee noted that this model was different in other jurisdictions, where UNRs that discern how funds are distributed are often embedded within LTRGs. Because that primary function occurred outside the LTRGs in NYC after Sandy, the UNR was at times considered a competitor that drew resources away from the local level. At points, partnerships with the UNR and LTRGs helped ease these tensions, but eventually LTRGs attempted to bring allocation of funding directly into their coalitions. They decided to take this approach because removing the roundtable functions out of LTRGs at times made it difficult to sustain the model and to keep members.

One interviewee reflected on the need to not only bring funders to LTRGs, but to also consider them to be a competency like any other competency, rather than an overriding source of power: “I think a lot of times the funders are seen to be like gods, but they are not gods. They’re just people with money. And if they want to spend their money, they need to listen and participate as an equal partner with the people who have the skills, the knowledge, or the connections.” As previously discussed, LTRGs saw successes around the third year in recovery in bringing these funds to their respective taskforces, focusing on coordinating various services to meet the needs of complex cases. In at least one case, this development in the LTR landscape helped create a new LTRG:

We were able to form a more accountable and rigorous coalition into the third year of recovery because I told them they would get the resources for their clients if they took part. It was about the bottom dollar at that point. I figured out how the system was working and I told them if they work together we would get money for people in their community. And we did, and that helped incentivize people to stay and it helped guide us to consensus that would bring us resources sorely needed.

The interviewee understood how funding worked, how funders think, and how often they are incentivized to accountably disperse their funds. By framing funders as equals to other organizations, the coalition also helped bridge gaps between funders and direct services: “Everyone sat at our table. The disaster case managers spoke about their cases, the rebuild organizations divided up who had capacity to do what, and then the funders would work out together how we would pay for the project.”

In some cases, funds were given directly to LTRGs and distributed among coalition members through “pass through grants” or collective pools of savings through which members could request funds for special projects. Some coalitions did not aim to receive any direct funding. They saw their role as helping organizations work together, so that they would be able to advocate for more funding and resources individually. As one interviewee described: “If I’m a rebuild organization, I would get more funding because I was rebuilding more homes by being better connected with DCMs that helped a client get to the place where they could rebuild. It was all about coming to the table with your skills and your needs, so you can bulk up your resources.” Another coalition created a similar mechanism for workshopping and tracking complex individual cases among DCMs, rebuild, mental health, financial services, and legal services. It focused on cases likely ineligible for the citywide UNR. When the coalition adapted this model, it brought more funders to the table and towards cases with desperate needs. One interviewee noted that the localized model was necessary for really challenging cases that needed a wide array of services and would benefit from being more closely “observed for progress” at a smaller, local roundtable. These spaces also became areas for brainstorming difficult cases “where you brought all the expertise together to find a solution.” Interviewees also reported fraud prevention, “because of local knowledge of the case managers and knowing that some people didn’t really own that house, etc.” Due to these strengths, several interviewees recommended to adjust the current lack of coordination in the wider LTR landscape around funding by moving more funds to communities to coordinate.

Ultimately, LTRGs benefited from donated time, staff, and money from the least resourced among them: their community-based organizations. One interviewee explained why they often took the brunt of local funding:

Before the disaster, the resources for attending the community needs were in the social service organizations. During the disaster, individual people were donating funds to local groups, who were deploying those resources more quickly than others. And so, that's what saved us as we waited for the government funds to come in: the fact the individual, caring people donated a lot of money to their local trusted organizations or congregations to get those funds out immediately. And they continued to provide those funds to some degree in the years that followed. It was neighbors helping neighbors through those organizations at the LTRG table.

This ability to rapidly and locally disperse funds to fill gaps was augmented by structures of accountability and the embedding of funding into the more holistic recovery across services. It is a unique approach to the complex funding landscape of LTR and offered a way in which LTRGs made sense of the immense costs that faced their communities.

F. CROSS-CUTTING FINDINGS

In the course of interviewees, several themes arose that were not necessarily connected to one of the wicked problems but offer unique additional findings on how LTRGs functioned in NYC. They are shared here because, like the bulk of the research findings that can be tied to a wicked problem in the above qualitative analysis, they are helpful in informing the recommendations that will be outlined in the next chapter.

1. Legacy of LTRGs

The impacts of LTRGs in NYC extend beyond Sandy LTR. Several interviewees volunteered information about the legacies of these coalitions, without prompt, in LTR efforts in neighboring jurisdictions and preparedness efforts in NYC. These findings are shared due to the frequency of mentions among interviewees, who often saw their contributions in NYC as having longer term impacts and visions than Sandy LTR.

a. *In Puerto Rico in the Wake of Hurricane Maria*

Three years into Sandy's LTR, Hurricane Maria devastated Puerto Rico and the U.S. Virgin Islands, among other parts of the US. In the wake of this disaster, two interviewees brought their experiences in coordinating in the wake of Sandy into cities and towns in Puerto Rico. Both interviewees continue to serve in LTR efforts in PR, showing

the potential legacy of NYC's LTRGs not only in NYC, but in other communities in the wake of disaster. Interviewees described how their experience after Sandy informed their experience, but described an organizing landscape in Puerto Rico distinctly different from their previous experience:

There was something catalytic there. The disaster catalyzed the emergence of networks and the convergence of local anxieties and local aspirations—whether that is making community more resilient or reclaiming ownership of community assets that may be taken away by opportunistic post-disaster privatization—such as disaster capitalism. It awakened people to other inequities—like corruption and lack of independence—that leveraged similar organizing. I learned ways to tackle all that from Sandy, but the dynamic was new and real and specific to Puerto Rico.

Both interviewees expressed how it was sometimes difficult to adapt LTRG structures to Puerto Rico and described instead an even more grassroots approach that further incorporated community members. From their anecdotes, they witnessed less participation from governmental EM in these settings, but greater participation from community members, when compared to NYC. When asked why they decided to bring their organizing experience in the wake of Sandy to Puerto Rico, interviewees expressed a range of personal and professional reasons. One interviewee answered: “Give more than you receive. That’s not only a spiritual principle, but an organizing one. Once you understand the value of that principle, you want to keep serving your neighbors.” Another interviewee reflected on the “circle of life” nature of how community-led LTR coalitions have passed on their knowledge: coalition leaders from New Orleans who served in LTRGs after Hurricane Katrina had shared their experiences with New Yorkers, and then coalition leaders from NYC shared their experiences with the people of Puerto Rico.

The initial intent of this author was to include interviews with organizers in Puerto Rico of community-led LTR coalitions in the wake of Hurricane Maria. There were several limitations on the completion of this endeavor. Notably, many of these organizers were not only managing complex LTR efforts for Maria during the course of this study, but also navigated several periods of political upheaval, and destructive and continuous earthquakes in 2019 and throughout January and February 2020. Organizers did not have the capacity to provide interviews, and as the major issues disrupted LTR, the author also felt that a

comparative analysis using the framework provided here would not do justice to the tragic and unique complexity of Puerto Rico’s LTR. With that said, scholars contributing to the understanding of LTR and community organizing must elevate the experience in Puerto Rico—which offers strong case studies of organizing in the wake of Hurricane Maria.

b. *In New York City’s Community Organizations Active in Disaster*

The legacy of LTRGs in the wake of Sandy has also had reverberations in NYC. At some junctures, relationships between these coalitions also led to support laterally across these coalitions to later disasters—such as other recovery coalitions showing up for a building explosion in the Lower East Side in 2015 in a community that survived Sandy. Several LTRGs are still active in NYC, but have shifted their focus to preparedness efforts, such as LES Ready! and the SI LTRO. Others, such as the QRC and BK LTRG, contain representatives who continued work in the field, such as by forming or supporting new coalitions focused on preparedness, notably COADs in Queens and Brooklyn. Other COADs in Harlem, Manhattan, Southern Bronx, and Staten Island have collaborated with representatives from these five community-led LTR coalitions in creating their preparedness-based coalitions—taking lessons learned during Sandy to inform their buildout. They also inspired new coalitions to form, such as East Harlem Community Organizations Active in Disaster, Southern Brooklyn Community Organizations Active in Disaster, and South Bronx Community Emergency Network. Emerging and established community-led coalitions that serve the disaster cycle are now in every borough of NYC.

2. Political Consciousness via LTRGs

Several interviewees spoke of a phenomenon experienced by their coalition in which LTRG members, or they themselves, came to what one interviewee described as “political consciousness.” One interviewee became a community organizer and advocate for her community through the work of the LTRG and has since made a career focused on organizing. While the community she served already had political and organizing work, she learned how to better serve their community in other issue areas. Some members of LTRGs later ran for local office, started their own nonprofits, and became advocates for issues that overlapped with LTR—like NYC’s housing affordability crises, poverty issues,

and climate change work. Others described the experience as their foray into EM, with several organizations moving on to work for governmental agencies within the EM constellation. Although this may not seem like a case of political consciousness, two interviewees who were in this position described their inspiration for joining city government as being rooted in part by the work done in their LTRGs and the desire to see a Whole Community Approach actively built into governmental EM.

3. Role of Women in LTRGs

Although all of the LTRGs represented by interviewees had women in formal or informal leadership positions, one interviewee explained how some women and men were intentional about trying to break through the “dynamic of machismo” that could sometimes dominate some organizations. She mentioned how that machismo did not help in moments when the group was trying to reach consensus, or make decisions about the vision of their community’s recovery. She explained: “It is not that women are genetically more inclined to be compromisers or work behind the scenes. But many women have had to learn these skills to navigate a world that has not and does not always welcome their perspective. Sometimes, these are the exact skills you need to run and maintain a coalition, and to advocate for issues or voices that are not the loud ones.” Still, one interviewee reported challenges for female participants. She reflected: “Our board was mostly male. The decision makers were patriarchal in their mentality. But the ‘doers’ and informal leaders were often women whose work was undervalued and whose visions were not taken as seriously.” The combination of women in more leadership positions, and women experiencing common issues, helped form groups like the Women in Disaster Recovery Network, which connected women serving in the landscape across NYC.

4. Advocacy for the Whole Community Approach

Several interviews were critical of operationalizing of the Whole Community Approach in LTR. They believed in its principles but were concerned about the degree to which they were being practiced. One interviewee described the quandary of major LTR decisions and planning happening behind closed doors and without input for community members—such as the city’s CDBG-DR Action plan, which claims to have incorporated

community voices but appeared to opt mostly for established nongovernmental EM organizations over community-based organizations. She explained:

You have people making decisions about communities who aren't very close to what the struggles and the needs of the communities are. So what does it matter to them if these things continue to fail? They come in, they take their pictures, they go home. They wipe their hands of it once the dirty work of real recovery starts. Until actual communities have a real seat at the table, and a real say in what happens in long-term recovery, we're always going to have this issue of not 'correcting our actions.'

Four out of five interviewees mentioned frustrations with not being invited into conversations about citywide recovery funding, metrics for success, and visions for LTR. One interviewee mentioned that city agencies in particular never reached out to them to better align their work: "We aligned ourselves. We inserted ourselves. We just showed up at all the town hall hearings on Build it Back and insisted on meetings with our elected officials to force them to listen to what we were hearing happening on the ground." One of the quandaries facing these coalitions is that they were rarely included in pre- or post-disaster planning with government and private entities that were dispersing the bulk of funds. Even though they were filling critical gaps in that funding, they could not plan for how many resources were going to be needed at any point in the recovery. The other issue with not including these groups was that they sometimes predicted problems that would later become bigger issues in LTR. For example, reporting released by LTRGs predicted temporary housing issues during reconstruction. City agencies took a long time to address that issue and offer funding, which delayed recovery time and increased overall costs that may have been avoided had they heeded early warning flags.

As described, these issues represented gaps in how governmental EM applied the Whole Community Approach to LTR in NYC. However, at times LTRGs also battled to be taken seriously by nongovernmental EM. As one interviewee reported:

The tone of VOAD changed over since Sandy, but in the beginning it often felt like LTRGs were not welcome at the table, even though we were using VOAD models. Perhaps there was a tendency to judge new groups for not having the institutional knowledge. But the approach should have been: Let's draw the new people into our movement. Let's share what we know.

Several interviewees were hopeful that future LTR would see better alignment with VOAD, with some also expressing hope for alignment with city and federal agencies.

5. Professionalizing (and Recognizing) LTR and LTRGs

Several interviewees showed awareness of domestic and international issues that framed their experience as a reflection of problems with LTR on a wider level. They spoke about ways to professionalize the LTR landscape, notably by changing the ethos towards LTR as a problem that needed to be faced anew each time a community experienced it. One interviewee particularly pushed back on the passiveness she often confronted when speaking with disaster professionals about LTR:

So many times, people would say that's just what happens in recovery. But people who survive and serve LTR need to come together and say: no, this is not what's going to happen when a community is impacted. We want something different. We want to work collaboratively. We want to organize and invite government and national partners to our table, like the LTRGs tried to do in the different boroughs. We want to help our city figure out what they need to do to do better. Until people rise up and take part in planning for NYC's next LTR, it's going to be business as usual.

The same interviewee expressed that EM should begin meaningfully incorporating “Lessons Learned” for LTR into their evaluative process.

Interviewees also described the need for more professionalization of LTRGs. They mentioned how some more established organizations received more resources than LTRGs because they knew how to showcase their resource distribution. These coalitions didn't always know how to do that. Testimonials from organizations and clients showed the benefits of LTRGs, but those were often not strong enough to garner resources. One interviewee expressed concern that LTRGs had not learned how to capture their efficacy:

We coordinated the efforts of organizations—their volunteers, projects, etc. We didn't take credit for that, but we coordinated efforts that helped organizations complete more cases, expedite projects, and get more funds. They would not have been able to do what they did without our coordination because they were limited by what they could offer. They had to be a part of something bigger where they could get plugged into resources, relationships, and information. Dollars or households completed are not being tracked in the same way by LTRGs, but the coordination they do is huge, and it is hard to monetize. That's an

important point. It's hard to monetize the coordination, because that's not how we look at progress when we're looking at annual reports. But it's still crucial to the functioning of long-term recovery and the speed in which someone might recover.

Another interviewee expressed concerns about the continuity of LTRG models and operations between disaster events. She was afraid that "when the recovery dies, these models disappear along with all this knowledge and these lessons." She mused about a national repository that contained more information on LTRGs which could be accessed by current and future coalitions engaging in recovery efforts. She expressed that it should also be a place where people can find each other and connect around LTR resources. As she explained: "Whenever we meet people across the country that have done this type of work, we find we're all burning out, suffering, and feeling alone. If something existed to connect us and our models, maybe it could help with that feeling. Imagine if we could have gone to a warehouse and had a support network and access to all diverse array of models of where this happened elsewhere? Imagine if we had that type of connection to ideas and people during Sandy besides ourselves who were all in it together, but were all also struggling alone?" She expressed concerns with burnout and loneliness among LTRG coordinators and hoped for mechanisms that could bring people together not only to professionalize the field but also to better support the ones who stay through the long haul—the last responders.

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VI. A WAY FORWARD FOR THE LAST RESPONDERS

The day that five hundred residents gathered on Staten Island to commemorate the two-year anniversary of Sandy marked a time of great uncertainty and exhaustion for the people who had dedicated their lives to bringing families home. Many recovery workers saw initial energies fade as the ugly realities of LTR came into focus. Some had expressed hope in programs like BIB, and intended to scale down their personal and professional efforts. But it was becoming much harder for them to say farewell to Sandy when significant issues plagued programs like BIB, and new puzzles seemed to arise every week for recovering communities whose waiting caused more complex problems. The author knows this because she was one of the recovery workers coordinating the event that night as SI LTRO's Coordinator. LTRG leaders across the city faced similar uncertainties. We, the leaders of LTRGs across the city, co-founded a citywide coalition to form one voice of recovery to the city. We wrote testimonies, reports, and articles advocating for reforms to LTR in NYC. We swapped practices to help improve efforts back home for speedy, deliberate, and accountable recovery. Much of that work happened *after* the two-year anniversary and into the years that would follow. When the camera crews left and heroes went home, we stayed.

We were the last responders. We sat at the kitchen tables of hundreds of fellow Americans at nearly every stage of their recovery. On those tables, we sorted through mold-ridden possessions, organized copious documentation, worked through family recovery plans, and we prepared food for celebratory "Welcome Home" spreads. At these tables sat 9/11 first responders, hospice nurses, veterans, church custodians, MTA workers, firefighters, taxi drivers, and special education teachers. And then we sat at folding tables,

As outlined in the Research Design section of Chapter 1, interviewees are anonymous to preserve the honesty and integrity of responses. Direct quotes from interviews are thus included in this chapter without a citation. Every quote from an interview includes a reference to an "interviewee." The analysis also clearly denotes contributions from one or more of the five individuals who participated in 90-minute, in-depth interviews. These five individuals were selected for their leadership role in one of the following LTRGs in NYC: Brooklyn Long-Term Recovery Group, Bronx Long-Term Recovery Group, Lower East Side Ready! Long-Term Recovery Group, Queens Recovery Coalition, and the Staten Island Interfaith and Community Long-Term Recovery Organization

opened in the basements of local houses of worship and windowless warehouses. We sat with local LTR leaders, debating late into the evening. People experiencing their first disaster sat next to VOAD members with decades of recovery experience. And we sat at the boardroom tables in high-rise buildings with representatives from city, state, and national governmental and nongovernmental institutions. We glimpsed what recovery looked like at the “high level.” We were not invited to these tables often, but when we were, we met many people who wanted to alleviate the suffering of communities and build a stronger NYC. However, their tables were often too far away from the kitchens of homeowners and the warehouses of providers. Sometimes, community voices were folded into the decisions made at those tables. Often, the vision was not there soon enough to alter the impacts of decisions that measured in the billions of dollars.

Many of the last responders who had the privilege and the frustration to take part in various levels of LTR felt a mandate to push the kitchen, folding, and boardroom tables closer together. We thought that it would be the best way to grasp and tackle the wicked problems that overwhelmed our individual leaders and organizations. We designed our coalitions with this in mind. We saw this as necessary for families recovering from Sandy, and for our neighbors in NYC and across the nation who would face the wicked problems we had weathered in their own recoveries. This thesis is written in response to that mandate. It aims to apply scholarly rigor to approaches taken by community-led LTR coalitions in NYC to make sense of LTR’s wicked problems and collectively tackle them.

To achieve the aims stated above, this study first applies the complexity theory, and its concept of wicked problems that evade traditional top-down approaches, then to literature on domestic LTR. The assessment of LTR scholarship revealed five themes: (1) the union of large-scale disaster impacts with the challenges and inequities of every-day emergencies; (2) the race against dwindling public interest and resources that comes with the Issue-Attention Cycle; (3) barriers in helping survivors make choices between building back, building stronger, and abandoning their homes; (4) the difficult navigation of a complexity of programs in a landscape lacking clear leadership and coordination; and (5) complex costs that come from the slow burn of serving communities for years (or decades)

of recovery. Scholars of complexity theory suggest that one approach to these wicked problems is to create sustained and multi-sector stakeholder networks. One such model exists in LTR on the hyperlocal level: community-led LTR coalitions. The central inquiry of this analysis builds off this theory, asking: *What contributes to a community-led coalition's ability to make sense out of LTR's complexity and aid decision makers in advancing recovery efforts? What approaches are taken by community-led coalitions to tackle the wicked problems of LTR?* Qualitative analysis of five community-led LTR coalitions in the wake of Hurricane Sandy in NYC—commonly known as “LTRGs”—was selected as the method to approach this inquiry. That methodology included in-depth analysis of publicly available and privately shared materials produced by and about those coalitions, such as testimonies, reports, websites, presentations, and other print and digital information. The methodology included five 90-minute interviews with individuals who played coordinating roles in LTRGs for an impacted community in every borough of NYC.

This conclusion will (1) summarize findings from the qualitative analysis, (2) make recommendations for community-based providers interested in initiating or further developing community-led LTR coalitions, in addition to how governmental and nongovernmental EM professionals and scholars can support these coalitions, and (3) explore the consequences of the study on the fields of emergency management/homeland security and broader democratic participation in disaster recovery in the US.

A. SUMMARY OF FINDINGS

Measuring the “success” of LTRGs in approaching wicked problems in NYC can be difficult especially because of a lack of other academic research on the subject. However, the qualitative analysis collected in this study did demonstrate clear strategies used by LTRGs to make sense of and tackle each wicked problem. Some of these strategies were common across most LTRGs, while other strategies were diversified across LTRGs, often depending on the needs and strengths of their communities along with available resources. These commonalities and variations in strategies appear to align with what scholars say about wicked problems—notably, that they do not have one solution and can require leaders to rapidly and sustainably make sense of, design, and implement an array

of tactics.⁴³⁰ This analysis shows the approaches of LTRGs to (1) make sense of the wicked problem and (2) attempt to tackle it through a diversity of actions that eliminate elements of the wicked problem, or at least mitigate the suffering it causes on survivors in LTR. The chart below highlights the primary strategies used by LTRGs in NYC to make sense of and tackle each of the wicked problems outlined in Chapter 2 of this study.

1. LTRG Approaches to Wicked Problems

The qualitative analysis of LTRGs in NYC offered in this study demonstrates their strengths in making sense of—and subsequently tackling—some wicked problems, while others struggled to do so. These findings are organized in detail in Appendix B. Summary of Research Findings from the Qualitative Analysis. The Appendix organizes the findings from Chapter 5 into four questions for each of the five wicked problems: *How did LTRGs make sense of the problem? How did LTRGs struggle to make sense of the problem? How did LTRGs tackle the problem? How did LTRGs struggle to tackle the problem?* Below is a high-level of summary of the answers to those inquiries in Appendix B.

First, LTRGs were strong in making sense of the union between every-day impacts and large-scale disasters, in addition to taking very clear strategies towards mitigating its impacts, such as ensuring that service providers represented entities with both disaster-specific and community-based knowledge. LTRGs were also intentional about acknowledging and tackling the Issue-Attention Cycle—leveraging the resources and attention of earlier, more favorable phases of LTR in the Cycle, while also continuously assessing unmet needs to help “tell the story” of the later, less favorable phases of LTR. And, LTRGs showcased intentional approaches to coordinate across organizations and select coalition-oriented leaders, in order to assess and counteract the wider crises of too many leaders and not enough leadership.

Second, LTRGs were weaker in helping survivors and communities identify a common vision for their recovery and help navigate the impossible decisions of building back, building stronger, and abandoning. The LTRGs in the study also struggled to

⁴³⁰ Rittel and Webber, “Dilemmas in a General Theory of Planning.”

understand and tackle the costs of slow-burning crises—attempting to raise funds to support the immense costs that accrue as recovery extends into the long term, but failing to successfully overcome short-sighted funding cycles with inequities in resource distribution to members of LTRGs. For these and other wicked problems, a common theme that contributed to LTRGs' weaknesses was an inability to overcome the problems arising from decisions made at much higher levels of LTR. These problems arriving at a “higher-level” include national programs responsible for the billions of funds assigned to LTR through federal aid—such as CDBG-DR and the NFIP—that did not incorporate LTRGs or their members into design, funding allocations, or service coordination.

2. Limitations

At the start of each interview, a disclaimer was shared that asked interviewees to provide information about the coalition in which they served, and to refrain from opinions to the best of their ability. Interview questions were designed to provide first-hand explanations of how community-led LTR coalitions functioned, to hopefully fill gaps in the written coverage on the subject. In the qualitative analysis of Chapter 5, the author attempted to remove opinions and highlight biases in responses that still had relevant content to this thesis’ primary inquiry. Even with the disclaimers and attempts of the author, the qualitative data offered by these interviewees represent rich and critical, but nonetheless narrow and subjective perspectives on LTRGs.

The other limitation of this study is that it represents only one case study—specific to a domestic, urban environment in the wake of a coastal storm. The original design of the study aimed to incorporate qualitative analysis of community-led LTR coalitions in Puerto Rico in the wake of Hurricane Maria. However, the author selected not to include the qualitative research collected for an additional case study into this thesis because of: the strains on sources of first-hand experience in the midst of an especially stressful period of their LTR, the burgeoning nature of LTR scholarship on the landscape, and ever-changing nature of that LTR amid political and natural crises (including the resignation of political leaders, charges of corruption, and devastating earthquakes). These limitations and the findings of the rich and deep qualitative findings offered by interviewees from Sandy LTR

both signify the need for a much wider array of cases showcasing community-led coalition approaches to LTR's wicked problems.

B. RECOMMENDATIONS

Conversations with the last responders of Hurricane Sandy's LTR efforts in NYC yielded many recommendations for a better LTR for survivors and the people who serve them. Their visions include steps that can be taken by (1) the leaders of future community-led LTR coalitions, (2) the governmental and nongovernmental EM practitioners who hold major influence over the domestic LTR landscape, especially in the realms of policy and funding, and (3) scholars who are contributing to the ever-evolving academic universe of recovery studies (especially in the domain of LTR). This section will highlight some of the recommendations arising from this thesis that can be implemented across these sectors.

1. For Emergent Groups: Develop National Platforms and Tools by and for the Last Responders

The primary audience for this thesis is the future builders of community-led LTR coalitions—the last responders. As highlighted in this work, the sector often developing and leading these coalitions are community-based organizations, individuals, and groups, often without pre-existing disaster experience. The qualitative analysis of Chapter 5 revealed that emergent groups on the community level that are often responsible for founding, maintaining, and transitioning these coalitions. However, these leaders were not necessarily equipped with the tools to build a coalition given their emergence into the field in which they may have had no prior experience. Emergent groups must draw from the experiences of past last responders, such as those in NYC in the wake of Sandy.

As previously stated, this thesis does not aim to offer a silver bullet, but rather many silver pellets, to address the wicked problems of LTR. To offer a richness of approaches towards wicked problems, this work must be the first of many—it should be enriched with case studies from other LTR efforts across the nation and world, in urban and rural environments, and follow a spectrum of natural and manmade disasters. The need for this array of first-hand accounts of community-led LTR coalitions is the cause for the recommendations in this section. Several interviewees—and this author—benefited from

having contact with an organizer from a LTR effort in another jurisdiction who had already experienced the issues. Those interviewees—and this author—have also spoken to organizers interested in adapting NYC’s LTRG models across the country after fires, coastal storms, earthquakes, and tornadoes, among other LTR scenarios that followed Sandy. The following two recommendations and resources are proposed with this in mind.

Create an accessible, interactive, and stimulating repository of community-led LTR coalition models from across the nation and world. On a web platform or series of connected web platforms, it would allow leaders of the coalitions to design and submit their own narrative for their coalition. It can also be hosted on its own platform (the author has purchased “last-responders.org” for such a possible purpose), or on a site of a related organization (e.g. National VOAD website, website of a notable disaster philanthropy, or service organization that supports these coalitions, or research institution that focuses on disaster research, like the Center for Disaster Philanthropy). A standard framework can be offered for each LTR example—perhaps asking the same group of questions posed to interviewees in this thesis—that help prompt and organize the case studies. The studies can be presented through videos, recordings, podcasts, interviews, articles, profiles, or other accessible and interesting forms of conveying the coalition. It should be able to connect to the coalitions’ primary digital resources—its website, reports, assessments, or other items—in addition to the contact information for leaders who are willing to talk to other coalitions about their work. This self-curated archive could be immensely useful to leaders starting their own coalitions, wider recovery practitioners and planners, academics, funders, and the public. The platform has several uses:

- *A resource for leaders developing community-led LTR coalitions for their communities.* By offering diverse cases, resources, and connections to LTR “veterans,” the platform could be invaluable to communities starting coalitions.
- *A place for practitioners to showcase their work to gather potential resources.* This platform potentially connects coalitions to resources to support their coalition (such as funding)—especially if the coalition does not have its own website or other ways to pitch their work to funders in an engaging manner.

- *A platform to “professionalize” LTR by sharing resources, innovative practices, and lessons learned from a diversity of post-disaster environments.* Given the lack of centralized professional resources in LTR, this platform can help offer pragmatic and educational materials for those looking to develop their coalition or LTR career.
- *A live archive for academics studying the model.* Given the lack of resources on LTR and community-led LTR coalitions, this platform could provide helpful information for researchers and institutions looking to study LTR at a time when climate-induced disasters are likely to draw more attention to the field.
- *An informative tool for EM practitioners and planners working on domestic recovery.* National, state, and local EM agencies and planners would benefit from learning more about the realities of LTR at the community level when devising recovery planning that includes community recovery.
- *A more intimate view into LTR for community members or the wider public.* The platform would provide an accessible location for those who may be interested in how communities (or specifically their own community) recover(s) from disaster.
- *A network for last responders to feel connected, supported, and recognized.* The platform should include contact information for leaders of each case. Perhaps most importantly, from the author’s personal perspective as a last responder, this platform would function as a network for LTR leaders to feel less isolated and better connected to other innovative professionals in their field.

In addition to being accessible, the platform should also be shared by those organizations that are often the community’s introduction to the wider disaster landscape. Specifically, national, state, and local VOAD organizations, FEMA VALs and other community engagement specialists, and other governmental and nongovernmental EM practitioners should introduce this platform to community leaders in LTR. This tool cannot replace the value of having former coalition leaders and disaster professionals from organizations like VOAD and FEMA supporting the development of these coalitions. However, it can augment their work as a portal into the diverse worlds of community LTR. By having practitioners, scholars, and the public engage in such a platform by contributing

and processing its contents, the platform could also contribute to the ability of community-led LTR coalitions to better tackle the wicked problems of LTR.

Develop tools that guide emergent groups towards standing up and maintaining LTR coalitions. The checklists in Appendix C Sample Checklists for Emergent Leaders of Community-Led Long Term Recovery Coalitions draw from practices of LTRGs in NYC. It is important that these examples not only offer practices to test, but also the recommended periods in LTR to initiate them. The practices were selected because they could be scaled, tested, and adapted by other community leaders interested in developing community-led LTR coalitions. They can be complimented by technologies, such as Slack, open source websites, and other technologies that support implementation. This is one example of the products of the national platform described in the previous recommendation. It is only a “sample” because it is predominantly drawn from case studies in NYC. Ideally, the cases collected in the national platform for last responders would corroborate, challenge, or add to the practices included in these checklists. These practices could then be tested in other environments—notably in rural areas, in the wake of other natural or manmade disasters, and in diverse domestic/international political environments.

2. For Governmental and Nongovernmental EM: Learn When to Lead and When to Follow in Community-Led LTR Coalitions

Although recommendations predominantly cater to the community-based organizations, leaders, and associations often slated with building community-led LTR coalitions, the success of these coalitions may rely on certain steps by governmental and nongovernmental EM. As the current industry leaders in service to the disaster cycle, EM practitioners should take on more responsibility in filling in gaps in that cycle. As has been noted, gaps clearly arise in the domain of LTR, and EM’s position as the primary funders, planners, designers, and implementers of programs in LTR often make this sector the elephant in the proverbial LTR room.

a. *Governmental EM*

Governmental EM agencies on the federal, state, and local level can better integrate in several ways—and be integrated into—community-led LTR coalitions. LTR's

governmental EM programs represent the major sources of funding, collect significant data on survivor eligibility and unmet needs, and have several leadership roles in the NDRF. Given the immense scale of their programs, their decisions in program design often define the vision for the community’s recovery, whether or not the community was involved in the initial planning. The following recommendations target those roles (which have been expounded throughout this thesis in academic, public, and interviewee-provided content on their contributions to LTR).

Share and align data on applications for assistance and remaining unmet needs across sectors and programs. Federal programs like the Disaster Assistance Improvement Program can help community-led LTR coalitions by creating a more cohesive landscape of disaster assistance canvassing and case management data. Governmental EM should take a lead in fostering interoperability between different unmet needs and canvassing operations across their agencies, including those efforts coordinated by nongovernmental EM and emergent groups. This includes: (1) aligning data before the Common Application submission from initial canvassing of unmet needs/damage assessments and (2) updating the data after the Common Application submission to provide case status/case management. Further streamlining this process—such as giving an option on tax submissions to opt into having information automatically populated before disasters—should be achieved through this or one of several approaches.⁴³¹

Embed metrics on speed versus deliberation into the work. As described, Chile has been recognized for reforms in recovery which balance “speed” and “deliberation.”⁴³² The country achieved this result through a megacommunity approach: building a coalition of architects, government, businesses, community leaders and residents that were given a set window in the recovery planning process for deliberation, and then focused on a speedy execution of that intentional planning. This megacommunity model resembles community-led LTR coalitions, but with better integration of governmental leaders. Chile’s metrics for

⁴³¹ May et al., “Simplifying and Speeding the Recovery Process.”

⁴³² Within five years after an earthquake, Chile restored housing for 90% of displaced residents and “achieved 84% perfect performance in terms of indicators measuring an improvement in safety, amenity ecology housing and local economy.” Platt and So, “Speed or Deliberation.”

speed balanced with deliberation via a megacommunity approach could be leveraged by governmental EM in the U.S. in collaboration with community-led LTR coalitions.

Earmark funds and other resources for community-led LTR coalitions. The NDRF should predesignate funds for community-led LTR coalitions, which can be identified via FEMA VALs, state EM, and local EM. Ideally, coalitions would be pre-identified prior to the disaster in recovery planning and agree to set up a community-led coalition like an LTRG and receive funds for coordination. Resources like FEMA VALs and other EM technical assistance and funds earmarked for community recovery should also be shared with LTRGs. As noted in the next suggestion, several federal funding sources could support this effort. Local EM agencies should also pre-designate representatives to take part in these coalitions prior to and during LTR. Government might be hesitant to fund the “coordination” element of community-led LTR coalitions, but one of EM’s primary roles is to coordinate across services. This ethos should be extended to community-led LTR coalitions.

Incorporate community-led LTR coalitions into major LTR programs, especially those funded by CDBG-DR. A recommendation that arose throughout Sandy LTR in academic assessments of BIB, testimonies to city council from LTRGs, and even press is to incorporate nongovernmental EM and community-based organizations into CDBG-DR planning and implementation. One way to do this is through the community-led LTR coalitions that often convene these entities as members. As an academic assessment of BIB states: “Key to lowering attrition and ensuring that homeowners make it through the process and receive program benefits is having qualified staff to offer case management services, and support from elected officials, community organizations and other city agencies.”⁴³³ LTRG member organizations can support case management, moderate repairs, legal/financial/mental health counseling, support for temporary displacement—filling the significant gaps in the BIB program that could remain gaps in future CDBG-DR-funded housing recovery initiatives. CDBG-DR should be protected in

⁴³³ Pereira et al., “Patterns of Attrition and Retention in the Build It Back Program.”

congressional budgets, but its Action Plans should be written and amended to include nonprofit and community-based knowledge, capacity, and pathways for direct funding.

Implement the NDRF locally, taking a leadership role in implementing the framework, but ensuring community-led LTR coalitions are leading the “Community Planning and Capacity Building” RSF. The NDRF builds on the already existing competencies of EM to coordinate across functions through frameworks like the National Response Framework, applying this competency instead to recovery. Many local and state EM agencies have adapted the National Response Framework to their locality. They should do the same for the NDRF. For the RSF that focuses on Community Planning and Capacity Building, community-led LTR coalitions are a natural fit. A rich network of community providers can be integrated into long-term planning through this function. This approach could also offer clearer pathways for agencies to work with emergent groups in the wake of disaster, avoiding issues that were present for EM agencies local public health attempting to work with emergent groups in the wake of Sandy.⁴³⁴ The NDRF can also have national guidance like Australia’s Disaster Recovery Funding Arrangements that pre-determines funds distribution for recovery incorporating these coalitions. Governmental EM is responsible to support this network and identify roles and distribution of funds because it is currently significantly better resourced and organized to do so.

b. Nongovernmental EM

Nongovernmental EM organizations like national, state, and local VOAD members have potentially significant roles to play in supporting community-led LTR coalitions. They already provide support to community-led LTR coalitions through the LTR manual and the introduction of the LTRG model to local jurisdictions. However, they can expand their relationship with community-led LTR coalitions in the ways that follow.

Allocate funding and program designs for community-led LTR coalitions for the long term. Short-term funding cycles and program designs from VOAD organizations

⁴³⁴ Thomas Chandler et al., “Crisis Decision-Making During Hurricane Sandy: An Analysis of Established and Emergent Disaster Response Behaviors in the New York Metro Area,” *Disaster Medicine and Public Health Preparedness* 10, no. 3 (June 2016): 436–42, <https://doi.org/10.1017/dmp.2016.68>.

are currently the most common opportunity for these coalitions and their members to leverage funds. However, the short-term nature of these funding opportunities can damage coalitions and their members. The latter should make the case for longer-term funds and programs, especially to national philanthropies and local foundations, but VOAD members are often positioned to provide that support proactively as well. Sustainable funding and long-term program designs may be the most significant gift that can be given to a coalition, and VOAD should have the foresight to alter these funding cycles to acknowledge the length of LTR evident to its many members who have weathered several such efforts. They can support coordination of the coalitions in addition to their classic funding of direct services (which was cited as interviewees as the main type of funding).

Invite community-led LTR coalitions into the VOAD movement on the national, state, and local level. The marketing of VOAD should not be forced upon these coalitions, as their self-determination is critical to their development, but they should be invited to take part in the VOAD movement. LTRGs and COADs may be considered “VOAD-inspired” in that they often use VOAD models and terminology, but they are not formally recognized by VOAD. Recognition of these groups might include highlighting the many coalitions that have leveraged the LTRG model on the VOAD website under their national Long-Term Recovery Committee.⁴³⁵ Ensuring that LTRG voices are elevated at a national level, such as in national conferences, can also help highlight a model that is the grassroots manifestation of the VOAD movement.

Train VOAD members on the importance of these coalitions, encouraging them to take part and support them. For LTRGs in NYC, the participation, financial support, and technical assistance provided by VOAD members was a significant benefit. However, VOAD organizations that do not support these coalitions may compete and duplicate the work of coalitions when they would otherwise provide major funding. VOAD members should be trained in the roles of community-led LTR coalitions and encouraged to support these collaborative approaches.

⁴³⁵ National Voluntary Organizations Active in Disaster, “LTRG Committee,” National VOAD, accessed October 6, 2018, <https://www.nvoad.org/ltrg-committee>.

3. For Scholars: Enrich LTR Scholarship with Stories from the Field

Major gaps emerge in academic coverage of broad-based organizing in community LTR. In addition to the accessible national platform, more rigorous scholarly data should also be collected on these coalitions. These cases should be diverse, in both rural and urban areas, serving many types of disaster LTR scenarios. Ideally, the research would be public and easy to access for future creators of LTRGs. In addition, these community-led LTR coalitions use a variety of terms beyond “LTRG,” which may not be the most accurate or widely-used term to describe them. The expansion of literature on this topic should help identify common terminology for these coalitions.

C. IMPLICATIONS OF THE RECOMMENDATIONS

What do these recommendations mean in practice? What challenges must be taken into consideration in their application? What strengths do they offer that justify the efforts to overcome those challenges? This section will explore the value of the recommendations offered in this study from the perspective of the (1) host city for the case studies used in this qualitative analysis (NYC), (2) EM and homeland security landscape in which LTR resides, and (3) democratic nation in which these recommendations are being considered.

1. For Urban Area Coastal Zones: I’m Talking to You, New York City!

NYC’s government has already learned that it lacks the capacity to serve all 8.6 million humans in its charge alone in the wake of disasters—especially through the long duration of a recovery effort the scale of Sandy. Having all hands and minds on deck—including those LTRGs that appear to have the best access to the social capital of NYC’s vast conglomeration of communities—is its only choice. That is the urgent call that compels this author to explore avenues for more meaningful integration of community-led LTR coalitions into NYC’s recovery planning. However, before such integration is possible, NYC must genuinely desire that outcome across governmental EM, nongovernmental EM, and LTRGs and the coalitions that followed them in NYC.

A series of post-Sandy reports by the NYC Public Advocate and City Council highlighted major barriers in “collaboration,” “communication,” and “coordination”

between governmental EM, nongovernmental EM, and emergent groups in the response and recovery from the storm.⁴³⁶ The issues remained into LTR, prompting LTRGs to ask the city how they might formally fit into city-managed EM, notably through testimonies to the City Council.⁴³⁷ The City Council formed a Task Force which primarily recommended that the city “improve its mechanisms to communicate and coordinate with local partners,” recommending that “for cohesion and efficiency, it is important that the city partner extensively with non-profit umbrella organizations that can effectively serve as intermediaries and conveners.”⁴³⁸ These findings acknowledged the massive difficulties in assigning one lead nongovernmental system throughout the disaster cycle when NYC contains an immense and complex civic culture.⁴³⁹ The city has over 35,000 registered faith-based and secular nonprofits, and a frequently contested number of houses of worship that is sometimes conservatively estimated at 5,000.⁴⁴⁰ This number does not include the organizations that come rushing into the city in the wake of disaster.

Expecting one entity—whether that is the local VOAD or one of the other major nongovernmental coalitions in the city—to represent all established and emergent nongovernmental providers may be unrealistic.⁴⁴¹ LTRGs were seen as smaller, more agile units of coordination that allow for “smaller houses of worship and non-profit organizations” to organize locally.⁴⁴² As the City Council acknowledged, the hyperlocal, flexible but structured, and cross-sector nature of LTRGs and COADs made them a valuable model in addition to VOAD networks. However, as noted in this analysis, some of the issues faced during Sandy have been attributed to barriers presented by

⁴³⁶ de Blasio, “Supporting Community-Based Disaster Response: Lessons Learned from Hurricane Sandy,” 4–6.

⁴³⁷ Staten Island Interfaith and Community Long Term Recovery Organization, “Testimony of the Staten Island Interfaith and Community Long Term Recovery Organization Before the New York City Council Committee on Recovery and Resiliency.”

⁴³⁸ Accamando and Lindsey, “Houses of Worship & Charitable Organizations Recovery Task Force,” 18.

⁴³⁹ Accamando and Lindsey, 25.

⁴⁴⁰ Accamando and Lindsey, 25.

⁴⁴¹ Accamando and Lindsey, 25.

⁴⁴² Accamando and Lindsey, 26.

organizational bias, competition, and divisions in language and culture between these three sectors in NYC. In addition, a lack of a citywide recovery plan or framework to attempt to convene these disparate sectors around a common cause for the future of NYC's recovery limits its success. This process has been initiated in NYC, and if it includes intentional relationship-building and buy-in into a mutually utilized framework, it may yet encourage a unity of effort that reflects the ethos of LTRGs post-Sandy.

Despite some progress, coordination must still be built between governmental EM, VOAD, and LTRGs/COADs in NYC. All parties must continue to sort through perceived and real obstacles to partnership. Succumbing to disorder in the current landscape and embracing the idea that these systems should operate predominantly independently of one another in LTR may be tempting, but it is counterproductive. What is at stake if the environment experienced during Sandy repeated itself? As highlighted by the Human Services Council: "The absence of clear coordinating mechanisms in both government and the human services sector is a serious deficiency in disaster preparedness."⁴⁴³ NYC would lose out on opportunities to streamline, expand, and deepen its services to New Yorkers throughout the disaster cycle. The city should also expect continued failure in filling gaps in services to New Yorkers who face inequities that disproportionately threaten them during emergencies and throughout LTR.

The city would glean numerous benefits from bringing together its governmental EM, nongovernmental EM, and emergent groups in the community-focused models of LTRGs. Assessments of Sandy by the Human Services Council in NYC saw the ability of emergent groups and community-based organizations at the helm of LTRGs "to conduct outreach to isolated groups and individuals," especially around language and disability, access, and functional needs.⁴⁴⁴ They asserted that "the potential of networks for collaboration within neighborhoods is significant and has not yet been fulfilled," but show that the degree of interest among partners at various levels to experiment with this

⁴⁴³ Human Services Council and Baruch College School of Public and International Affairs, "The Human Services Sector of NYC: How Ready Are We for Emergencies?," July 2016, 16, <https://humanservicescouncil.org/wp-content/uploads/Initiatives/DisasterPreparedness/Emergency-Readiness-of-the-Human-Services-Sector-2016-Report.pdf>.

⁴⁴⁴ Human Services Council and Baruch College School of Public and International Affairs, 19.

approach.⁴⁴⁵ The aforementioned expanded reach and trust wielded by LTRGs would bring agencies greater flexibility in delivering messages and services to hard-to-reach populations. In return, integration could save money for EM efforts by avoiding duplication of services and leveraging the cost savings of volunteers and donations management.⁴⁴⁶ Integration also strengthens public relations by demonstrating shared partnership with providers who directly serve communities, while also encouraging community leaders who may have the local political power to support and align agendas with the agency.⁴⁴⁷

2. For National Emergency Management and Homeland Security: Filling Holes in the “Whole Community Approach”

Trust is a critical resource in homeland security. The evidence presented throughout this analysis indicates its relative scarcity in LTR. Issues with licensing, funding security, liability and other legal/financial inadequacies often arise in the assessments of emergent groups by governmental and nongovernmental EM. However, before one can tackle these logistical concerns, the question of trust and perception arises. The emergent groups that often develop and populate community-led LTR coalitions face the dilemma of being perceived as inherent threats to established government and nonprofit agencies. As Quarantelli and Stallings expound in their assessment of emergent groups in disaster:

Such emergent groups seem to imply that no public organization exists to respond to the situation or that existing ones will not act in potential or actual emergencies. Partly because of this perceived implication of failure, the appearance of such groups is frequently controversial. Public officials often do not take them into account in community emergency management planning and misunderstand both the reasons behind their emergence and the roles they play in disaster-related community problems. This is especially unfortunate because these kinds of emergent citizen groups are likely to be even more prominent in the future than they are at present.⁴⁴⁸

⁴⁴⁵ Human Services Council and Baruch College School of Public and International Affairs, 19.

⁴⁴⁶ Rajib Shaw, “Community-Based Disaster Risk Reduction,” *Oxford Research Encyclopedia of Natural Hazard Science*, August 31, 2016, <https://doi.org/10.1093/acrefore/9780199389407.013.47>.

⁴⁴⁷ Shaw.

⁴⁴⁸ Stallings and Quarantelli, “Emergent Citizen Groups and Emergency Management,” 94.

Similar distrust also appears in studies on the relationship between governmental EM agencies and VOAD. Egan and Tischler found in their interviews with government emergency managers that, while they found VOAD efforts to be “heroic,” they also felt that they “get in the way” and are “unreliable” and “disorganized.”⁴⁴⁹ The authors note that these interviewees were “seeking a measured, structured response” and look for “partners in recovery that use this approach.”⁴⁵⁰ Although VOAD efforts vary, this governmental EM perspective indicated a lack of knowledge of the various structures used by VOAD. Egan and Tischler concluded that “these criticisms or suspicions are largely a result of a lack of understanding of process and organizational approaches taken by each sector in its disaster operations.”⁴⁵¹ They also noted that the use of language can represent differences in ideological approach. For example, governmental agencies tend to use vocabulary like “populations,” while VOADs speak more of “families” and “individuals”; this reflects the differences in missions as well.⁴⁵² The former focuses on processes that alleviate impacts for the largest possible population, while the latter may focus intensively on the full support and recovery of more personal units like the individual, family, or community.

Practitioners and scholars have also acknowledged the barriers that arise in the differences in structures and sense of control between these sectors. Aaron Titus, president of the Mountain West VOAD, explained these tensions in a recent FEMA Prep Talk:

Government and the people see very different constellations after disasters. The community constellations tell a story of collaboration and compassion. Government constellations tell a story of command and control. Look closely and you’ll see that our communities have already organized. They have their own constellations. You don’t need to impose order.⁴⁵³

Titus notes that emergency managers are trained “to control an emergency” which translates to also controlling a disaster, which he compares to giving the sector a “tool to

⁴⁴⁹ Egan and Tischler, “The National Voluntary Organizations Active in Disaster Relief and Disaster Assistance Missions,” 75.

⁴⁵⁰ Egan and Tischler, 75.

⁴⁵¹ Egan and Tischler, 75.

⁴⁵² Egan and Tischler, 76.

⁴⁵³ Titus, “PrepTalks: Let the Community Lead: Rethinking Command and Control Systems.”

dam a stream, and then tell them to stop the tide.”⁴⁵⁴ Like Quarantelli and Stallings, Titus acknowledges that large-scale disasters galvanize the time and resources of people who in “their nature desire to help a neighbor,” and that the field loses out on the added capacity it may require not only in disaster response, but in the months, years, and sometimes decades of recovery that follow the incident.⁴⁵⁵ The concepts Titus raises are not new to EM: they align with EM’s Whole Community Approach. However, EM’s Whole Community Approach may be an obstacle itself. It aspires to unify disparate systems and incorporate wider societal capacity, but it mostly offers principles in lieu of more meaningful, structural guidance on how to integrate emergent groups and nongovernmental EM into governmental EM.⁴⁵⁶ This gap creates inconsistencies and uncertainties across EM agencies in regards to where, and how, emergent groups and nongovernmental EM should be incorporated in all phases of the EM cycle, especially during LTR.

By attempting to incorporate the disparate systems and players in EM, community-led LTR coalitions like LTRGs take a Whole Community Approach with communities at the helm. They present a cross-cutting model that taps into the layers of social capital that surround an individual and their community—which can, in turn, determine their survival, recovery, and resilience.⁴⁵⁷ They also address the “inevitable emergence” of citizen groups and organizations before and after disasters that “are stimulated by the perception that a problem or issue is not recognized or acknowledged by others.”⁴⁵⁸ They do so while still staying tied to the more “established” EM systems offered by VOAD and governmental EM agencies. Thus, they fill a hole in the Whole Community Approach—at least for LTR. They ultimately offer a new framework that aligns with a shift in EM that practitioners like Aaron Titus have been recommending for several years:

This new framework would consider the benefits of whole community engagement and acknowledge that all communities are polycentric

⁴⁵⁴ Titus.

⁴⁵⁵ Titus.

⁴⁵⁶ Federal Emergency Management Agency, *A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action*.

⁴⁵⁷ Aldrich, *Building Resilience*.

⁴⁵⁸ Stallings and Quarantelli, “Emergent Citizen Groups and Emergency Management,” 98.

collections of stewardships. Government is one of many centers. This whole community framework would permit coalitions of competitors to transparently work together around shared interests. It would also describe non-hierarchical interactions during the entire recovery cycle, rather than just command and control relationships during the response phase.

Ideally, community-led LTR coalitions are situated at the intersection of the polycentric circles of stewardship across governmental/nongovernmental EM and emergent groups.

Governmental EM should not be discouraged by the current disorder between, and sometimes within, these systems. Although community-led coalitions may represent a more decentralized approach, one might consider the approach itself a more resilient system for disasters because it helps avoid single points of failure. This author contends that the stakes are too high to ignore the opportunities for a unity of efforts that can still maintain the decentralized nature of these coalitions. That said, it is unknown whether these coalitions would want to work with governmental EM across the board. There are also concerns that they won't be compelled to align their services after several years of distrust directed against them. Resources may be a significant pull, but that option is currently limited for them. For this reason, governmental EM must initiate the goodwill towards a real partnership that does not merely check the box of the Whole Community Approach but represents "a relationship between interdependent equals."⁴⁵⁹

The implications of not pursuing these relationships can have long-term impacts. According to Eric Keller and Christopher Zinner, some evidence shows that "citizens who experience government as a complex labyrinth of disconnected organizations are unlikely to be highly satisfied with their interactions, especially when they compare them to the ultra-connected digital world they encounter in the private sector," which contributes to "a steady decline in Americans' trust in their government."⁴⁶⁰ Some breaches in trust also arise from the hoarding of information that occurs between these sectors, but especially between EM agencies and their partners/the public. The lack of information flow violates the recommendations for how to approach wicked problems, which suggests the need to bring

⁴⁵⁹ Titus, "PrepTalks: Let the Community Lead: Rethinking Command and Control Systems."

⁴⁶⁰ Eric Keller and Christopher Zinner, "Streamlining Government Services in the Digital Age," *Public Manager; Alexandria* 44, no. 2 (Summer 2015): 29.

together a diversity of voices as rapidly and sustainably as possible to determine the true shape and feel of the problems faced by a complex crisis. As Robert Oppenheimer, a “father of the atomic bomb,” explained when advocating for more open security policies in 1955:

The trouble with secrecy is that it denies to the government itself the wisdom and the resources of the whole community, of the whole country. And the only way you can do this is to let almost anyone say what he thinks—to try to give the best synopsis, the best popularizations, the best mediations of technical things that you can, and to let men deny what they think is false. You have to have a free and uncorrupted communication.⁴⁶¹

The current chaos and breaches in trust and information of LTR can have negative, long-term impacts. Not only do these issues burden disaster survivors and create waste, but they contribute to tensions in government-public relations. The support of community-led LTR coalitions—and the recommendations that have been proposed—can be an operational and philosophical step towards the rebuilding of trust.

Scholarship on broader government planning efforts in the U.S. has been asserting since at least the 1970s that the “linear systems approach” has failed to address the major problems evading these top-down systems.⁴⁶² The intentional buildup of vertical and lateral social capital is a way to break through traditional linear approaches. The next generation of disaster assistance should emphasize models like these coalitions, so that U.S. may better engage with the richness of its societal capacity when recovering the homes and lives of its citizens. A former FEMA Administrator, Craig Fugate, thoughtfully acknowledged this necessity in congressional testimony:

Government can and will continue to serve disaster survivors. However, we fully recognize that a government-centric approach to disaster management will not be enough to meet the challenges posed by a catastrophic incident. That is why we must fully engage our entire societal capacity, leveraging trade associations, non-governmental organizations – including those that represent different linguistic and ethnic minority groups, faith-based organizations, private industry, and social and fraternal organizations. These are the organizations that provide the bulk of services to communities

⁴⁶¹ Mark Lloyd, *Prologue to a Farce: Communication and Democracy in America* (University of Illinois Press, 2010), 140.

⁴⁶² Rittel and Webber, “Dilemmas in a General Theory of Planning.”

every day, and to the extent that they are able, they should continue to be the primary provider of such services in a disaster.⁴⁶³

Studies in citizen and partner engagement by government agencies writ large support this claim. As Madeline McNamara states in her work on public administration: “In the face of complex problems, resources shortages, and diverse social communities, 21st century governance requires public managers to rely on a myriad of partnerships to integrate the delivery of public goods and services.”⁴⁶⁴ With the growing chasms of distrust between government and citizens, social capital building helps domestic EM towards the place in which it can better access that societal capacity. These approaches not only help us better weather the catastrophes ahead; they can also help us build back the trust in government that our nation’s leaders require to function in both crisis and peace.

3. For a Democratic Nation: Understanding Community-Led LTR Coalitions as Democracy in Disasters

A rather significant query underlies this thesis: How should democracy inform how we revive American communities in the wake of disasters? Surely, in a democratic nation, the role of our form of governance should be considered for something as critical as bringing our cities and towns back out of crises. Scholars like Jeffrey Stout have leveraged the example of broad-based organizing by faith-based networks in New Orleans in the wake of Hurricane Katrina to evaluate the application of democracy in disaster zones. The recovery landscape that Stout sketches—like Sandy LTR—sees facets of the democratic process playing out. Specifically, both landscapes see tensions and balances between “representative democracy” and “grassroots democracy.”⁴⁶⁵ In these definitions, citizens are defined as “individuals who gave a share of responsibility for the arrangements and

⁴⁶³ United States Department of Homeland Security, “Testimony of Craig Fugate, Administrator, Federal Emergency Management Agency on ‘Catastrophic Preparedness: How Ready Is FEMA for the Next Big Disaster?’,” DHS, March 17, 2011, <https://www.dhs.gov/news/2011/03/17/testimony-craig-fugate-administrator-federal-emergency-management-agency>.

⁴⁶⁴ McNamara, “Starting to Untangle the Web of Cooperation, Coordination, and Collaboration,” 399.

⁴⁶⁵ Stout, *Blessed Are the Organized*.

policies undertaken by the republic” and a republic is defined as “a polity officially devoted to securing liberty and justice for its citizens.”⁴⁶⁶

Using Stout’s framework, elected officials and government agencies of the republic are predominantly examples of “representative democracy”—in which critical services (such as recovery support) are discerned and distributed by those individuals and agencies that citizens have directly or indirectly chosen to represent them. The emergent community-based organizations and individuals highlighted by Stout exemplify “grassroots democracy”—in which the recipients of those services and the providers that directly serve them before and after the disaster inform the recovery functions.⁴⁶⁷ The latter functions on the belief that “ordinary citizens can indeed act responsibly and effectively if they organize themselves properly and cultivate the virtues and skills of democratic leadership.”⁴⁶⁸ This democratic approach is “an evolving collection of practices intended to perfect the exercise of political responsibility by citizens in a republic that officially aspires to be democratic.”⁴⁶⁹ In the case of LTR, citizens can exercise this responsibility through their local community leaders and organizations.

Too often, discourse on LTR—and the disaster cycle in general—frames the onus of recovery as *either* a matter of self-reliance of communities *or* the responsibility of government. Perhaps it is both. Citizens elect legislators to represent them and executives to steer the bureaucracies managed by their government. If they expect to be supported in the wake of disasters by those they elect and pay, then government is responsible for providing those services to the best of its ability. *And*, citizens are responsible for supporting their government in how to provide those services, including filling gaps in services that the government cannot provide. These two manifestations of democracy—the former representative and the latter grassroots—should be coordinated in the wake of crisis. Rarely does literature or discourse on LTR recognize the shared responsibility for

⁴⁶⁶ Stout, 7.

⁴⁶⁷ Stout, 7.

⁴⁶⁸ Stout, 7.

⁴⁶⁹ Stout, 13.

governmental/nongovernmental EM and community-based emergent groups/individuals to function as one community of practitioners that balance these forms of democracy.

Community-led LTR coalitions like LTRGs predominantly reflect the principles of “grassroots democracy,” but the model’s connection to more established EM also showcases its attempt to connect to “representative democracy.”⁴⁷⁰ Like Aldrich’s work on social capital that identifies lateral social capital building (closer to grassroots democracy) and vertical social capital building (closer to representative democracy), successes rely on the health of both types.⁴⁷¹ The key to these coalitions is that they are led by communities, but incorporate the knowledge, resources, and networks of the experts of the republic that the community elects and pays (via taxes). The implications for the community-led LTR coalition then, for recovering communities, is that this can offer a confluence of the two democracies, in addition to fusing vertical and lateral capital building and the three primary sectors of LTR practitioners.

D. WHEN THE SEA NEXT RISES

This author is a fourth generation New Yorker. She wonders how many more generations of her family will see the sea rise and drown the lives and homes of her neighbors in the archipelago of NYC before genuine, community-wide planning is facilitated. This planning must anticipate a different type of recovery—one that acknowledges the stark realities of a changing climate. LTR planning for NYC must include a full reckoning by communities that their homes and livelihoods in the highest risk zones will be significantly more at risk. The next last responders in NYC need to position themselves out of their jobs by helping New Yorkers avoid the need for recovery through intentional flood mitigation and relocation. This rethinking will require a new generation of community organizers and disorganizers in NYC, who hopefully will inherit from the last generation of LTR leaders. The ultimate goal of this last responder might be to become the last responder that their community will need in the wake of disaster. The author is not alone in this sentiment, which was echoed by an interviewee:

⁴⁷⁰ Stout, 10.

⁴⁷¹ Aldrich, *Building Resilience*.

How many more disasters and wastes of billions? How many more arcane funding cycles that don't match the need and don't encourage collaboration? How many more research papers with the same themes? Because when you work with each other as we demonstrated in our LTRG, you're able to get more resources to the people who are suffering. And yet, people still hoard data, information, and resources, and do not want to work together in the best interest of the community. We can no longer allow for this city, or this nation, to lack unified planning for long-term recovery. And we can no longer afford to remain disconnected from the people doing the work of recovery with little to no resources—the people on the ground.

In the life work of Quarantelli on the sociology of disasters, he often looked to debunk the myth of pandemonium in post-disaster environments. In fact, he found that “natural disasters democratize social life” and “strengthen community identification,” with emergent groups switching on to help “like a kind of civic immune response.”⁴⁷² In the observations of his team, people were neither lambs nor wolves, but perhaps more human in the wake of crises. Over fifty years of social science research by Quarantelli and other scholars suggest that the emergence of helpers is not exceptional but expected. This author, and the interviewees of this study, testify to this phenomenon—not only in the immediate wake of the disaster, but in the many years that follow. It is time to plan for disasters and the long shadow of recovery with these, the helpers, the last responders, in mind.

A journalist writing on Quarantelli’s life asked this question to close his tribute: “Why do we struggle to see ourselves outside the myths Quarantelli debunked? He wondered that himself. It’s hard to accept that goodness might be ordinary, hard to imagine a truth as deflating and reassuring as that.”⁴⁷³ The message shared by Quarantelli and the last responders in NYC may be hard to accept. They tell us that unity of efforts between citizens and practitioners could be ordinary, possible, and expected in the wake of disaster. They show us how to revive our towns and cities after crises in a manner that reflects our nation’s democratic ideals. And they suggest that when the sea next rises on our hometowns, communities might not break faith with one another, but stay to the last.

⁴⁷² Mooallem, “Henry ‘Enrico’ Quarantelli Proved That Disasters Bring Out the Best in Us.”

⁴⁷³ Mooallem.

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APPENDIX A. ADDITIONAL FIGURES

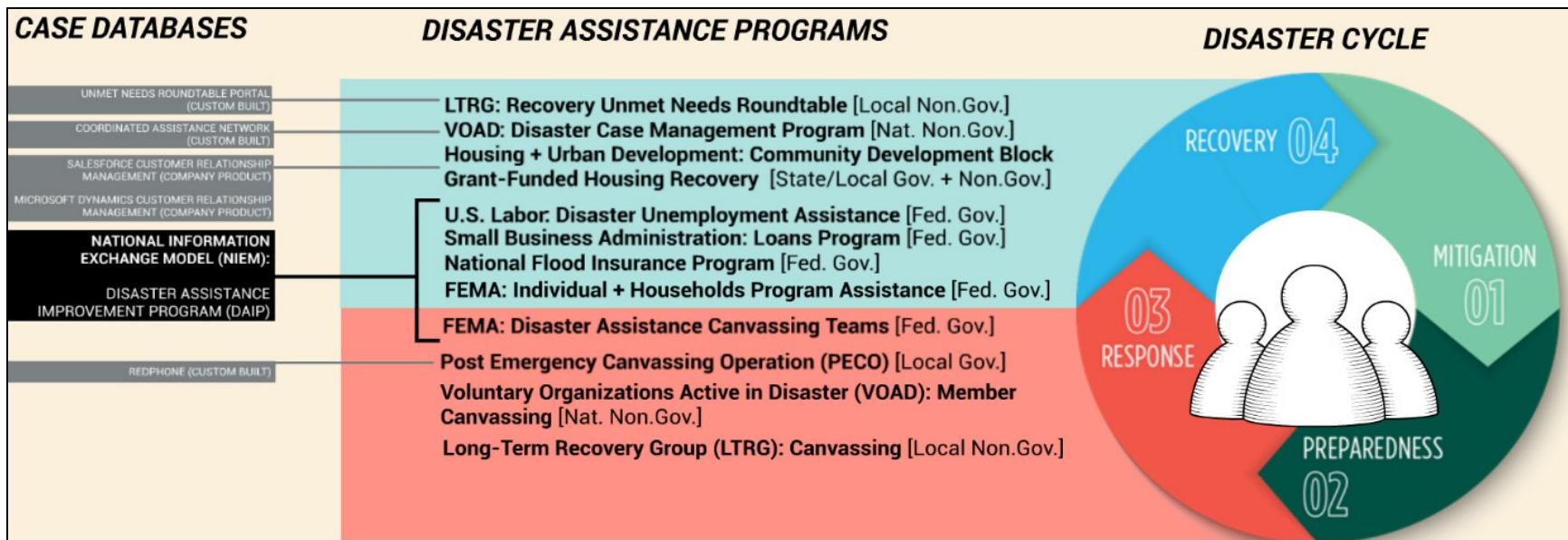


Figure 14. Hurricane Sandy Major Disaster Assistance Programs Serving NYC and Respective Case Databases

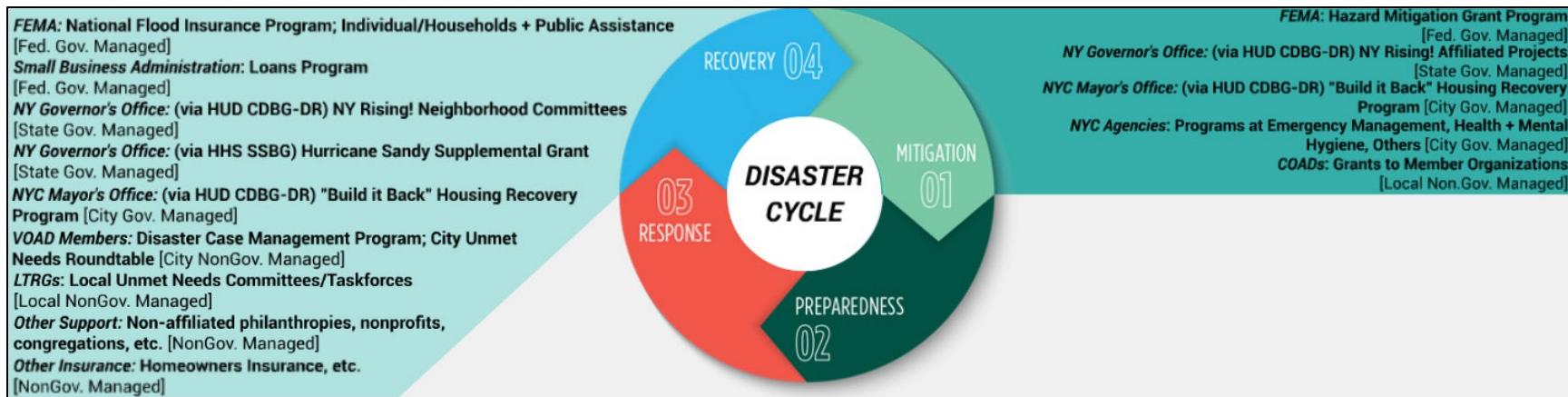


Figure 15. Major Sources of Disaster Recovery and Mitigation Funding Serving New York City after Hurricane Sandy

APPENDIX B. SUMMARY OF RESEARCH FINDINGS FROM THE QUALITATIVE ANALYSIS

1. UNION OF LARGE-SCALE DISASTER AND EVERY-DAY EMERGENCY

Questions: *What were five major issues (social, economic, political, or other) present in your community before the disaster that impacted its long-term recovery? What were five major strengths? Please describe how your coalition approached these issues or leveraged these strengths, if applicable.*

How did LTRGs make sense of the problem?	How did LTRGs struggle to make sense of the problem?
Most LTRGs exhibited a fluency around these issues in their community: income/wealth, race, housing affordability, political representation, and health/mental health issues. They also understood the historical/political/cultural context. Some LTRGs were concerned about poor quality of housing, serving aging populations, and meeting the needs of persons with disability, access, and functional needs. Most LTRGs identified organizations to bring into the coalition that had experience with these issues to help make sense of them—alongside EM-experienced organizations that added the complexity of a post-disaster landscape. Some LTRGs had representation in their leadership by community members experiencing every-day emergencies and disaster impacts, who helped leaders better understand issues firsthand.	There was sometimes a lack of consensus between member organizations of LTRGs around “inequities,” and whether or not organizations should explicitly address and design services around those issues. When asked about what strengths were pre-existing in the community that had traditionally addressed these issues, some LTRGs failed to identify those strengths.
How did LTRGs tackle the problem?	How did LTRGs struggle to tackle the problem?

<p>All LTRGs crafted anecdotes that turned “abstract” trends of every-day emergencies meeting disaster impacts into powerful stories. These were accompanied by concrete recommendations, which often influenced LTR policy.</p> <p>All LTRGs leveraged expertise and services from community organizations familiar with pre-existing emergencies <i>and</i> EM-experienced agencies. By coordinating these services, they were able to offer holistic LTR services to survivors.</p> <p>Most LTRGs had participation by DCMs, who functioned as navigators and advocates for recovering families—helping them create personal recovery plans that leveraged disaster-specific and wider social services.</p> <p>Some LTRGs had their recovery planning informed by the coordination of member community organizations around past issues, such the post-Recession housing crisis.</p> <p>Most LTRGs created structures for legal, mental health, financial, and case management services to be coordinated, along with “traditional” recovery services like home repair and temporary housing assistance.</p> <p>Some LTRGs encouraged/moderated debates around how to address issues, finding solutions or creative distribution of services when there were disagreements between members on which issues to prioritize.</p>	<p>Some LTRGs struggled to find a unified platform for advocacy due to differences in ideological and political backgrounds.</p> <p>Most LTRGs struggled to raise and distribute funds that addressed both every-day emergencies and disaster impacts, as much funding was designed for disaster impacts alone.</p> <p>In some cases, LTRGs acknowledged and advocated against the inequities, but felt that the complexity or multi-generational weight of the inequities often outweighed any attempts to address it in the context of LTR.</p> <p>Several LTRGs referenced compassion fatigue affiliated with trying to carry out this more holistic and personal LTR alongside survivors.</p>
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2. AFTER THE SPOTLIGHT: DWINDLING ATTENTION, ENERGY, AND RESOURCES

Questions: *How did your coalition gain and maintain buy-in throughout LTR? How is your coalition structured (e.g., hierarchy, network, hybrid)? Did you leverage any existing structures and/or technological platforms to organize? If so, what structures and/or platforms were leveraged?*

<i>How did LTRGs make sense of the problem?</i>	<i>How did LTRGs struggle to make sense of the problem?</i>
<p>All LTRGs emphasized formal/informal mechanisms for “listening” to members, who offered diverse perspectives on how the Issue Attention Cycle (the “Cycle”) was impacting their services. Awareness of this helped LTRGs understand the Cycle’s impacts and gather tactics for surviving its unfavorable phases.</p> <p>Most LTRGs tried to maintain situational awareness across the wider LTR landscape—helping community-based LTR connect to critical intelligence on what was happening in other communities in NYC, or even on a national level.</p> <p>Some LTRGs created mechanisms to continuously assess unmet needs of survivors, even when “official” sources of canvassing stopped. They needed this data to make sense of needs during unfavorable phases.</p>	<p>Because LTRGs were often not included in “higher-level” decision making on LTR, such as by federal/state/city agencies, they were often uncertain of how to plan for their own coalitions’ resources and sustainability.</p> <p>LTRGs often did not know the timeline of major city programs like BIB, the total remaining unmet needs they should plan for, and other information that would have been critical for them to fully make sense of the Cycle.</p>
<i>How did LTRGs tackle the problem?</i>	<i>How did LTRGs struggle to tackle the problem?</i>
<p>Most LTRGs were founded within the first six months to one year of recovery, when the most resources/attention/energy were available. Establishing structures in favorable phases helped sustain coalitions through unfavorable phases.</p> <p>Most LTRGs maintained coordination across members through forums, committees, and other ways to organize otherwise disparate entities. This maximized services when resources were scarce in unfavorable phases.</p>	<p>LTRGs were often unable to secure resources for the long term, even though they identified early on that they would be serving in long-term efforts.</p> <p>Most governmental and nongovernmental funding cycles were not made to support efforts in the long term, which meant constant lobbying for more funds in unfavorable stages. It was hard to maintain buy-in when LTRGs were losing members to short-sided funding cycles.</p>

<p>The unmet needs canvassing data collected by most LTRGs helped them advocate to elected officials/funders/other authorities for more resources during unfavorable phases.</p> <p>Most LTRGs leveraged windows of opportunity during unfavorable phases (such as anniversaries or “trending” issues relating to their work), in addition to “testing” the coalition structure during other emergencies.</p> <p>Some LTRGs were intentional and strategic about sustaining early structures and maintaining member/community buy-in through unfavorable phases. Leaders did this through intentional marketing of coalition benefits; achieving quick wins; building transparent, continuous participation channels; and creating trust.</p> <p>Most LTRGs built coalition structures that weathered the long-term by balancing hierarchy and network models, hosting many options for member participation, and even in one case forming a 501c3</p> <p>All LTRGs leveraged pre-existing structures like LTRG + community organizing models and a diversity of technological platforms to sustain their coordination.</p>	<p>Some LTRGs did not find their coalitions during favorable phases of the Cycle (six months to one year into recovery) and struggled to sustain their coalitions.</p>
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3. IMPOSSIBLE CHOICES: BUILD IT BACK, BUILD IT STRONGER, ABANDON IT

Questions: Was a common vision identified for the recovery of your community? If so, were related goals/values/points of consensus agreed upon for your coalition? How diverse were stakeholders? Were there difficulties reaching consensus?

How did LTRGs make sense of the problem?	How did LTRGs struggle to make sense of the problem?
<p>Most LTRGs strived for a diversity of stakeholders—by service type, EM experience, demographic representation, and personal versus professional affiliation with Sandy. This diversity of perspectives</p>	<p>For the most part, LTRGs struggled to lead conversations around LTR planning that identified a common vision.</p>

helped member organizations better understand hesitations and confusion of survivors that contributed to decisions about LTR.	LTRGs claimed that the bulk of services in the wider LTR landscape (mostly dispersed by government) were not cohesive, which trickled down to inconsistent choices at the local level, and made it difficult to make a cohesive recovery plan for their community.
How did LTRGs tackle the problem?	How did LTRGs struggle to tackle the problem?
<p>LTRG member organizations that offered case management services—notably through DCMs, legal aid advisors, mental health workers, and financial counselors—often helped guide survivors towards informed choices in their LTR.</p> <p>Some LTRGs spearheaded educational campaigns—such as around the projected rises in flood insurance costs for homeowners—which helped survivors make “resilience-friendly” choices for the long term, like flood mitigation.</p> <p>Most LTRGs reached consensus around the vision for their coalition and its respective goals. While this did not usually expand to the wider community of survivors, there were cases of community-wide decisions for LTR.</p>	<p>LTRGs appeared to have predominantly failed to lead their coalition members and wider communities into a common vision around the end state and end goals of the LTR.</p> <p>Members of LTRGs often did not agree around what options should be made available to survivors (e.g. building the home back, elevating the home above flood levels, or taking a buyout of the home). This contributed to inconsistencies in services offered.</p> <p>Like many coalitions, LTRGs struggled with conflicting goals and beliefs, clashing organizational cultures, ego, and self-serving agendas between members that sometimes impeded a common vision of recovery.</p> <p>LTRG member organizations were often funded by different sources, each with different expectations for eligibility and for the wider LTR. VOAD member organizations, for example, sometimes had different expectations for LTR priorities and “end state” than community-based members.</p>
4. TOO MANY LEADERS, NOT ENOUGH LEADERSHIP	
<p>Questions: Were these sectors at the table: (1) community-based organizations, groups, or individuals “new” to disaster, (2) nongovernmental providers with disaster experience, and (3) established EM governmental agencies? How was leadership determined / was there any competition for leadership?</p>	

How did LTRGs make sense of the problem?	How did LTRGs struggle to make sense of the problem?
<p>LTRGs attempted to integrate organizations from the three main sectors of LTR practitioners: governmental EM, nongovernmental EM, and emergent groups. Having representation from each sector helped them understand real/perceived barriers in coordination.</p> <p>LTRGs tried to assist survivors make sense of a chaotic LTR landscape devoid of clear leadership through members that offered DCMs and legal aid. These providers acted as “navigators” for families and the LTRG.</p>	<p>The wider LTR landscape in NYC post-Sandy experienced vacuums in leadership across agencies that led to poor interoperability and coordination between services that were essential for survivors.</p> <p>Without interoperability in the wider LTR landscape, it was difficult for LTRG, LTRG members, and survivors to make sense of the services available to them. This ultimately led to delays in services and hardships for survivors.</p>
How did LTRGs tackle the problem?	How did LTRGs struggle to tackle the problem?
<p>Most LTRGs had representation from governmental EM, nongovernmental EM, and emergent groups in the coalition—providing a leadership model that encouraged lateral coordination between these sectors for the sake of streamlining LTR for survivors.</p> <p>Most LTRGs identified several types of leaders with skills and personalities that members felt were suited for LTR: servant leadership; ability to “preach” coordination; behind-the-scenes organizing; and strong advocacy.</p> <p>LTRGs were intentional about removing members that disrupted coordination and sought leadership for personal gains to protect the space for true coordination across providers and sectors.</p>	<p>While governmental EM had some representation through FEMA VALs, and later through city agencies, there were gaps throughout LTR in governmental EM participation in LTRGs. This gap often created problems in information and resource sharing that negatively impacted LTRGs.</p> <p>Some LTRGs saw early crises in leadership and coordination that had major impacts on their LTRG and the surrounding community. LTRGs also faced the competition between members that played out in wider LTR and impacted coordination.</p>

5. COSTS OF SLOW BURNING CRISES

Questions to Interviewees: *What resources were available for this work before and after the disaster? How were resources secured and distributed among coalition members?*

<i>How did LTRGs make sense of the problem?</i>	<i>How did LTRGs struggle to make sense of the problem?</i>
Most LTRGs attempted to track the ebb and flow of resources, identifying major gaps in funds to make sense of remaining financial needs. They leveraged advocacy platforms to highlight the complex costs of LTR and advocate for resources for survivors.	For the most part, LTRGs did not have access to the full scope of funds allocated for LTR. Because they were not integrated into most federal, state, and city distribution of funds, they did not have full understanding of the scope and barriers to major sources of funding.
<i>How did LTRGs tackle the problem?</i>	<i>How did LTRGs struggle to tackle the problem?</i>
<p>Some LTRGs created mechanisms to more efficiently leverage scarce and dwindling mechanisms, such as local roundtables to fund cases.</p> <p>Most LTRGs leveraged volunteers, donations, philanthropic/ fundraised monies, and other resources to fill in gaps in needs among survivors—especially later in LTR.</p> <p>Some LTRGs created systems for equitably distributing resources among members and tracking the progress of cases that were given funds in order to foster efficient and responsible deployment of resources. Most LTRGs aimed to reduce duplication in services to avoid wasted funds.</p>	<p>As LTR proceeded, costs from initial damage impacts accrued with costs from delay in services (displacement, etc.) to create immense financial needs. However, resources designated to LTR dwindled steadily, making it more difficult to meet these needs financially for LTRGs and the wider LTR landscape of services.</p> <p>Most LTRGs were unable to quantitatively demonstrate the cost savings and increased fundraising that they claimed that their coordination structures. Coordination was hard to monetize—which made it difficult for LTRGs to raise funds for the management of the coalition.</p> <p>Due to funding cycles that did not plan for the long term, LTRGs saw periods when they saw significant drops in organizations that lost their Sandy funding.</p>

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APPENDIX C. CHECKLISTS FOR EMERGENT LEADERS OF COMMUNITY-LED LTR COALITIONS

IN THE EARLY STAGES OF COMMUNITY LONG-TERM RECOVERY (LTR)

- Prior to identifying leaders, listen to the vision of a diversity of community members and practitioners. Early listening sessions help identify effective leaders and organizations in the community, and prevent takeovers by leaders not best suited to facilitate a coalition.
- Consider “tested” community-led LTR coalition models, such “Long-Term Recovery Group (LTRG)” models, or non-disaster-specific models from the fields of community, grassroots, and broad-based organizing. This can help the coalition connect to supporting resources for the model, such as from VOAD members or FEMA.
- In the first six months to one year, create structures that can sustain the long term of recovery efforts (which could be up to a decade, depending on the scope and severity of impacts). The most successful structures appear to balance hierarchies and networks—often leveraging classic organizing models like service-specific committees, steering committees, and service fairs/forums for the public.
- Look for pre-existing coalitions to host a community-led LTR coalition—especially if they have a “preparedness” focus, like a COAD. Other voluntary, local groups with emergency management knowledge that may be helpful include Community Emergency Response Teams and Citizen Corps Councils.
- Connect early to funding, volunteer, and donated resources, especially from governmental and nongovernment organizations. Grants/other resources will be most accessible within the first six months to two years after the disaster, and then will continually dwindle.
- Balance quick wins with long-term strategies. Early quick wins—like a coalition-wide rebuilding day or advocacy initiative—are critical to gaining and maintaining buy-in with community members, member organizations, and funders. However, as these coalitions need to maintain energy over the long term, leaders need to balance quick wins with intentional long-term strategies.
- Look for the helpers and organizers, and know how to bring them in. In early phases, helpers with energy and compassion, along with organizers with experience in broad-based organizing, need to be encouraged to participate and supported to sustain participation.
- Designate funds and staffing for coordinating the coalition, ideally for someone with a broad-based organizing background. LTRGs that designate funds early for the coalition benefit from having coordinators working full time to organize members across the coalition.
- Call out organizations or persons early that disrupt coalition-building in a respectful, but firm manner. Individuals or organizations with self-serving agendas, egos, or other isolating behaviors need to be taken out of leadership positions, especially early in LTR.
- Get ahead of possible divisions in ideology, priorities, or service-types. This can be done by empowering “factions” to take on their own projects, committees, or advocacy efforts.

THROUGHOUT COMMUNITY LONG-TERM RECOVERY (LTR)

- Ensure the following functions are sustained throughout recovery:**
 - Assessment of unmet needs among impacted communities**, understanding the numbers, types, and costs of remaining need throughout LTR.
 - Coordination of services** (case management, rebuilding, donations, volunteer management, spiritual/emotional care, mental health services, legal aid, financial counseling, etc.) for individual cases, with a mechanism to brainstorm challenging cases.
 - Equitable and transparent process for assigning and tracking progress** of cases in their recovery and mitigation.
 - Unified strategy and platform for advocating** across coalition members for policy and resource changes.
 - Processes for carrying out wider community planning and visioning.**
 - Mechanisms to sustainably gain and distribute resources** to cases, member organizations, and wider coalition work.
- Bridge the major sectors of LTR practitioners: emergent groups and governmental/nongovernmental emergency management.** Those without experience in the community should not be defining its vision and goals; however, emergency management organizations come with critical knowledge from past disasters and organizational resources. Community-based organizations fluent in the community's every-day emergencies should be balanced with disaster-experienced organizations that know how to connect the community to the right resources.
- Build lateral and vertical social capital.** Laterally, coalitions should be broad-based—representing a diversity of services. They should also represent a diversity of communities served—across racial, ethnic, age, mobility, and other demographics. They should also engage sources of power to create critical vertical connections—such as local elected officials, the press, and “influencers.”
- Be intentional about the spokespersons and leaders for the group.** Ideally servant-leaders, preachers, strong advocates, and behind-the-scene organizers are involved in the coalition throughout the LTR.
- Connect to community-led LTR coalitions in neighboring and external jurisdictions.** Neighboring communities may contain similar coalitions that can share successes, challenges, data, and trends, and can support broader advocacy platforms.
- Monitor leadership and representatives for burnout—especially compassion fatigue.** For LTR efforts that extend from the intense first six months to more than a decade, identifying burnout and fatigue among coalition leadership and member organizations is vital. Bringing in new organizations, having term limits for leadership, and taking other precautions can sustain the coalition.

IN LATTER STAGES OF COMMUNITY LONG-TERM RECOVERY (LTR) - TRANSITIONING INTO PREPAREDNESS

- Align with other issues facing the community outside LTR.** To maintain interest and resources towards the end of LTR, the coalition may need to expand its scope to other issues to bring in new members and continue to mobilize the coalition (i.e. local opioid crisis, building explosion, or raising support for other jurisdictions experiencing disaster).
- Strengthen advocacy platforms.** Later in LTR, strong mechanisms to advocate for meeting unmet needs and policy changes may become one of the primary functions of the coalition. This stage is when member organizations that focus on legal services and advocacy can take more of a lead.
- Consider transitioning the coalition into a COAD or embedding it with another coalition that serves the community.** If not already affiliated with a pre-disaster coalition, leaders should look to sustain the membership they transition by connecting to a preparedness-focused, or other, coalition. Certain services to persons in LTR may also be transitioned into member organizations' non-disaster services and should be identified for transition.
- Capture projects, data, and reports completed by the coalition.** These products should be placed in an accessible archive, so that leaders of the coalition after future incidents (or other coalitions) can work from available resources.

BEFORE THE NEXT DISASTER

- Make a community-wide emergency plan for when/how to re-activate the community-led LTR coalition.** The coalition should have a plan developed in concert with community members that identifies when the coalition would activate its recovery operation, and the structures and services that would plan to participate.
- Pre-secure funding for the coalition.** While funding for preparedness-focused coalitions that can transition into, or branch into, community-led LTR coalitions is scarce, some jurisdictions may have resources designated to mitigation and preparedness. Coalitions can also sign Memorandums of Understanding with members, or local foundations, that outline the support they would designate (i.e. staff time or funds) if the coalition were activated.
- Work with local governmental/nongovernmental emergency management on a community-wide recovery framework/plan that designates roles between organizations.** If the jurisdiction is not already implementing a local recovery plan as recommended in the NDRF, then community-led LTR coalitions should advocate for it and ensure their inclusion. Ideally, planning is carried out with community members to discuss options in future LTR with incentives for choosing flood mitigation or relocation.

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